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FM 7 - 25

DEPARTMENT OF THE ARMY FIELD MANUAL

HEADQUARTERS COMPANY INFANTRY REGIMENT

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DEPARTMENT OF THE ARMY

AUGUST 1950

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FM 7-25 C 4

FIELD MANUAL

HEADQUARTERS COMPANY, INFANTRY REGIMENT

CHANGES DEPARTMENT OF THE ARMY No. 4 WASHINGTON 25, D. C., 27 August 1953

FM 7-25, 21 August 1950, is changed as follows:

- 4. Duties of Company Headquarters Personnel
 - e. The mess steward * * * duties also include—
 - (2) (Superseded) Assisting headquarters company commander by drawing, preparing, and distributing class I supplies and water.
- f. The supply sergeant * * * individual supply records. He supervises the company armorer.
- j. The company armorer operates under the supply sergeant's supervision. He makes repairs on small arms and other company equipment, except motor vehicles and signal equipment. Maintenance is performed * * * item of equipment.
 - I. Rescinded.

21. Headquarters and Headquarters Company Mess

The mess steward * * * headquarters company mess. When the kitchen operates from the regimental trains area, he works under the service company commander's direct supervision.

22. Company Supply

- a. The headquarters company * * * the regimental S-4. Worn or damaged items to be replaced are sent with these requests. The supply sergeant * * * see paragraph 80.
- b. The company supply * * * fuel, and lubricants. He operates in the company area or with the regimental trains, and is assisted by the company armorer.

23. Ammunition Supply

The headquarters company commander controls the supply of ammunition carried in the company. The supply sergeant * * * their own transportation.

24. Transportation and Automotive Maintenance

- a. The motor sergeant * * * headquarters company commander. He assists in the supervision, control, and supply of company transportation, the training and operation of drivers and mechanics, and motor vehicle maintenance.
- b. Transportation is provided * * * carried on the company maintenance truck. Reserve containers for gasoline are obtained by taking some of the 5-gal-



lon cans from other vehicles. Normally, one truck goes to the regimental class III supply point with empty cans. These cans are refilled, and a resupply of lubricants is drawn at the same time. Company drivers normally refill their vehicles from these cans, and they obtain a resupply of lubricants at the company maintenance truck. Individual vehicles going * * * III supply point.

c. Automotive maintenance of * * * the motor park. Vehicles that cannot be repaired by company mechanics are evacuated to the regimental truck maintenance section which is usually in the regimental trains area.

On figure 4 change SCR-300* to read AN/PRC-10 and SCR-608* to read AN/GRC-10. Delete strip: *(OR ITS EQUIVALENT)

On figure 21 change SCR-300* to read AN/PRC-10 and delete strip: * (OR ITS EQUIVALENT)

75. Duties of Message Center Section Personnel

- a. The signal message supervisor is responsible to the platoon leader for the discipline, training, and operation of his section. His duties include—
- b. The senior signal message clerk's duties include—
 - (1) Assisting the signal message supervisor.

76. Duties of Wire Section Personnel

a. The wire foreman is responsible to the platoon TAGO 715C

leader for the discipline, training, and operation of his section. His duties include—

- (7) Keeping the signal message supervisor and the platoon leader informed on the status of wire communication.
- b. The wire team chief's duties include-
 - (1) Assisting the wire foreman.
 - (2) Organizing the wiremen into teams for laying and maintaining local and trunk wire lines.
 - (6) Seeing that the wiremen use prescribed techniques in the installation and maintenance of the wire system.
 - (7) Keeping the wire foreman informed of the status of wire supply and the serviceability of wire circuits.
- c. Wireman's duties include-

77. Duties of Radio and Visual Section Personnel

- a. The chief radio operator is responsible to the platoon leader for the discipline, training, and operation of his section. His duties include—
 - (8) Keeping the signal message supervisor and the platoon leader informed of the status of radio communication.





b. Radio operators' duties include-

- (9) Keeping the chief radio operator informed of the status of radio communication.
- c. Radio mechanic's duties include-
 - (4) Maintaining the authorized level of parts for maintenance and keeping the chief radio operator and the platoon leader informed of the status of parts supply.
 - (5) Notifying the chief radio operator and the platoon leader promptly when any item of signal equipment requires repair beyond the capabilities or facilities of assigned mechanics.

81. Maintenance of Signal Equipment

Each unit maintains and repairs its signal equipment within the limits of its maintenance facilities, available parts, authorized tools and test equipment, and the capabilities of assigned mechanics. Maintenance performed by * * * replacement of parts. When the equipment becomes inoperative, or an inspection reveals it may fail to operate because of excessive wear of some part or parts, it is turned in to the radio mechanics, for repair. Unserviceable items that * * * repaired and returned.



84. Radio Communication

a. Radio is a principal * * * skill of the operators. Figures 26 and 26.1 show typical radio nets in which the regimental communication platoon operates.

b. Radio equipment issued * * * ground installations only. The principal characteristics of radio sets currently issued within the regiment are shown

in table I.





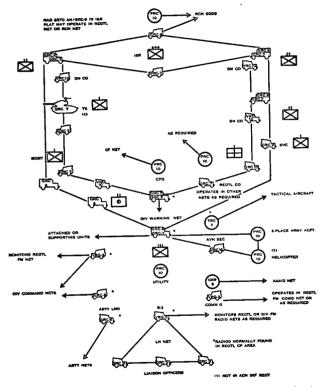
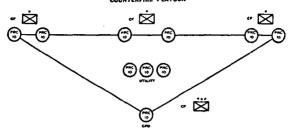


Figure 26. (Superseded). Type radio nets for an infantry regiment.



COUNTERFIRE PLATOON



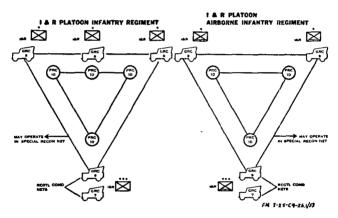
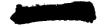


Figure 26.1 (Added). Counterfire and I & R platoon radio nets for infantry regiment.

Figure 27. Rescinded.

Table I. (Added). Principal characteristics of radios found within the infantry regiment.



		—Security Inf	ormation
Frequency range	2-12 mo.	"A" Set: 38.0-64.0 mo. "B" Set: 47-68.4 mo. Aux Rec: 38.0-64.9 mo.	"A" Set: 88.0-64.9 mc. "B" Set: 47-58.4 mc. Aux Rec: 88.0-64.9 mc.
Type of operation	Transportable (3 man load) or vehicular.	Vehicular. (Components of set man-transportable when used with Modification Kit MX-888/GR).	Vehicular. (Components of set man-transportable when used with Modification Kit MX-898/GR).
Obannels	6 crystals and continuous tuning.	"A" Set-170. "B" Set-115. Aux Rec-170	"A" Set-170.
Type of signal	AM: VOICE, CW. MCW.	FM: VOIOE.	FM: VOICE.
Operating range	30 mi OW stationary. 15 mi VOICE stationary. 20 mi CW moving. 20 mi MCW stationary. 20 mi MCW stationary.	"A" Set: 16 mi VOIOE stationary. 10 mi VOIOE moving. "B" Set: 1 mi moving or stationary.	"A" Set: 16 mi VOICE sta- tlonary. 10 mi VOICE mov- ing.
TAGO	9-080 WA VA VA VA VA VA VA VA VA VA VA VA VA VA	S AN/GRO-7	AN/GRO-8

Type	Operating range	Type of signal	Channels	Type of operation	Frequency range
AN/VRQ-3	"A" Sets: 16 mi VOICE stationary. 10 mi VOICE moving.	FM: VOICE.	"A" Set-170.	"A" Sets are man-transportable when used with Modification Kit MX-898/GR).	"A" Set: 38.0-54.9 mc. "B" Set: 47.0-58.4 mc.
AN/VRO-10 (AN/VRC-15 same as AN/ VRC-10 plus interphone amplifier.	"A" Set: 16 mi VOIOE stationary. 10 mi VOIOE moving.	FM: VOICE.	"A" Set-170.	"A" Set is man-transportable when used with Modification Kit MX-898/GR.	"A" Set: 38.0-54.9 mc.
AN/PRC-10	3-5 miles.	FM: VOICE.	170.	Man-Pack.	38.0-54.9 mc.
AN/PRO-6	1½ miles.	FM: VOICE.	43 (1 preset).	Hand-carried.	47.0-55.4 mc.



On figure 29 change SCR-300* to read AN/PRC-10 and SCR-619* to read AN/GRC-7. Delete strip: *(OR ITS EQUIVALENT)

91. Oral Communication Orders

- c. Instructions to each * * * of the following:
 - (1) Instructions to the signal message supervisor concerning the location * * * routes to them.
 - (2) Instructions to the chief radio operator concerning the location * * * and visual means.
 - (3) Instructions to the wire foremen concerning * * * a line-route map.

93. Communication Training

a. Communication training is * * * and radio telegraph operators. Certain specialists, such as communication officers, communication chiefs supervisors, and radio mechanics, should receive their training at service schools.

116. Night Operations

Night combat requires * * * and radio stations. Messengers, drivers, and wiremen are oriented as to routes. To avoid making * * * use wire dispensers.

TAGO 715C





120. Operations in Snow and Extreme Cold

Combat in snow * * * sleds or toboggans. Wiremen and messengers are trained to use skis and snowshoes. It usually is * * * for heavy equipment.

APPENDIX IV

INFANTRY BATTALION AND REGIMENTAL MESSAGE CENTERS

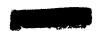
3. Personnel

The message center is composed of three functional groups. They are the operational group composed of the signal message supervisor and his assistant, a senior signal message clerk; the code group composed of the code clerks; and the messenger group composed of the messengers. Each of the * * * FM 24-17.

7. Message Center Log

This log is * * * in figure 59.

b. The right half * * * with the unit SOP. The signal message supervisor makes a periodic check with all agencies of communication of units with which it is connected to insure that the log is current. Unit SOP usually * * * with other units.



8. Message Center Log Operation During Echelonment

a. When the command * * * the new site. The signal message supervisor decides that 10 numbers will be more than sufficient for the message traffic at the old command post site.

10. Message Envelope

The message envelope * * * by the messenger. With this information, the signal message supervisor or communication officer can check against delay time in the delivery of messages. In addition, the * * * time of receipt. The signal message supervisor enters the time a messenger is dispatched and the time he returns. The messenger enters * * * the unit SOP to the unit SOP.

14. Coordination of Means of Communication

b. (Superseded) The signal message supervisor coordinates the use of the various means of communication by selecting the most suitable and rapid means available for the transmission of any message. See FM 24-5 for further instructions.

15. Processing and Servicing Messages

a. Processing. When a message is handed to the message center for transmission, the signal message supervisor or clerk processes it. Processing consists of * * * exceed 2 minutes.

TAGO 715C



b. Servicing. When the signal message supervisor receives a receipt or notification of transmission for a message transmitted by an electrical means, pigeon, or airplane pick-up, he enters the time of receipt and his initials on the face of the duplicate copy of the message and encircles both entries. Messages carried by * * * or delivery list.

18. Preparation of Skeleton Copy

When only one copy of a message is given to the message center for transmission, the signal message supervisor or clerk prepares a "skeleton copy" for use in the live and dead file. This is done * * * face of the message.

21. Incoming Message by Scheduled Messenger

The incoming scheduled * * * they are receipted. The signal message supervisor delivers the messages to the addressee (sergeant major or representative of the addressee).

24. Outgoing Clear Text by Radio

After processing the * * * and services it. The signal message supervisor or clerk enters on the face of the message the time of receipt (as given to him by the radio operator), the supervisor's or clerk's initials, and encircles the entry. The duplicate is then placed in the dead file.



26. Outgoing Encrypted Text by Radio

After processing the * * * time of receipt. The signal message supervisor takes the duplicate copy of the original message from the live file, services it, and places it in the dead file. The code clerk does not service messages in his code clerk's file.

27. Incoming Encrypted Text by Radio

When receiving a * * * the sergeant major. If the unit SOP prescribes it, the code clerk may get a receipt on a second carbon copy of the clear text when he delivers it to the addressee, giving it to the signal message supervisor or clerk to hold for a period of time. The code clerk does not place in his clerk's file copies of messages he decrypts.

28. Airplane Pick-Up

After processing and * * * receipt or pick-up. The signal message supervisor removes the duplicate from the live file, services it, and places it in the dead file. See FM 24-5 for detailed instructions.

[AG 322 (3 Jul 53)]





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Chief of Staff.

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FM 7-25

FIELD MANUAL

HEADQUARTERS COMPANY, INFANTRY REGIMENT

CHANGES DEPARTMENT OF THE ARMY No. 3 WASHINGTON 25, D. C., 15 December 1952

FM 7-25, 21 August 1950, is changed as follows:

APPENDIX IV

INFANTRY BATTALION AND REGIMENTAL MESSAGE CENTERS

(Superseded)

Section I. GENERAL

1. PROCEDURE

The following procedure is applicable to message centers of infantry regiments and battalions. Any similar procedure which emphasizes speed, simplicity, and accuracy is acceptable.

2. RESPONSIBILITIES

- a. A message center receipts, encrypts, decrypts, routes, and delivers all official messages, with the following exceptions:
 - Messages sent by military or U. S. postal services.



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- (2) Local messages—those originating and delivered within the command post.
- (3) Messages transmitted by originator directly to addressee.
- (4) Incoming messages delivered by special messenger directly to the addressee or his representative.
- b. Additional responsibilities of the message center are to keep a situation map and official time—
 - (1) Situation map. The locations of command posts with which the unit maintains communication are shown on this map. Routes to the various command posts, as much of the tactical situation as necessary, conditions of the routes, mined areas, areas under enemy observation and artillery fire, and existing field wire lines are also placed on this map. All of this information is used to brief messengers.
 - (2) Official time. The message center keeps the official time for the headquarters. The message center should have an accurate time-piece and should obtain the official time from the next higher headquarters at least twice daily. When working as a separate combat team, the radio and visual section may synchronize with standard time signals which are broadcast on certain frequencies throughout the day. Time broadcasts give the correct time to the nearest second.



Section II. ORGANIZATION

3. PERSONNEL

The message center is composed of three functional groups. They are the operational group composed of the chief and his assistant, a clerk; the code group composed of the code clerks; and the messenger group composed of the messengers. Each of the three groups may be divided into increments to provide echelonment of the section when the command post moves and to provide shifts for around-the-clock operation of the message center; see FM 24-5 and FM 94-17.

4. EQUIPMENT

The items considered essential to a message center are paper and pencil, a timepiece, necessary codes, a complete SOI, and an M-209 conveter. Auxiliary items are message center logs, route delivery lists, message envelopes, and field message books.

5. LOCATION

a. Message centers are established at the headquarters of each command down to and including battalion. Signs are posted to show the location of the message center and, when no signs are posted because of the tactical situation, guides are placed at the entrance to the command post. On the march. the message center is at the head of the main body. When the battalion is the advance guard, the message center section of the battalion marches at the head

of the reserve element. During the march, message center vehicles may be marked by panels (as prescribed by the SOI) to identify the message center to friendly planes. For further instructions on the operation of a message center during a tactical situation, see paragraphs 97 and 98 and FM 24-5.

- b. The command post locations and the installation for message centers should provide—
 - (1) Protection and concealment from enemy and weather.
 - (2) Facilities for lightproofing at night.
 - Accommodations for personnel and equipment.
 - (4) Convenience to staff, roads, and trails.
 - (5) Proximity to electrical agencies of communication.
- c. The operation of a message center is continuous in a tactical situation whether at a command post or on the march.

Section III. RECORDS AND FILES

6. MAINTENANCE OF RECORDS AND FILES

The battalion or regimental message center maintains temporary records and files as follows: the message center log, the live and dead files, and the code clerk's file. Additional records may be kept, depending on the unit SOP.

a. Message Center Log. The log is an informal record of serviceability of the electrical communication means. It contains a list of numbers to be





assigned to outgoing messages. It may also provide columns for the entry of the means of communication selected for each message and for remarks relating to the message.

- b. Live File. This is a file of the duplicate or skeleton (par. 18) copies of outgoing messages for which a receipt or notification of transmission has not been received. These copies may be filed in large envelopes, cigar boxes, or any suitable container. As soon as a message has been receipted, the duplicate copy is placed in the dead file.
- c. Dead File. This file contains the duplicate copies of all outgoing messages for which a receipt or notification of transmission has been received. The S1 disposes of the material from the dead file periodically.
- d. Code Clerk's File. This file contains the original clear text copy of outgoing encrypted messages, code or cipher, and the original copies of all incoming encrypted messages handled by the code clerk. Material in this file is disposed of as directed by the unit communication officer.

7. MESSAGE CENTER LOG

This log is not a standard form but is prepared by the using unit to fulfill its particular needs and may be varied as demanded by the situation and conditions. An example of a log is shown in figure 59.

5 **TAGO 1953C**

			M		ENTER LO	_	
UNIT	2 D .	INF			DATE	6 0	CT 1952
Re UNITS TO	cord of	Servic AD	eabili	t y	MSG	Message I	dentification
WHICH CONNECTED	IN '	OUT	IN	our	CEN	HEANS	REMARKS
	6661		0001		\times	RAD	ALERT ORDER
lst					2	MSGR	PW INFO
Div	L				3		
					+		
	\$661	Ĺ <u></u>	0001		5		
lst					6		
Bn					7		
					8		
	0001	1749	8861	\$ 825	9		
24	\$910				10		
Bn					11		
					12		
	900T		OPOL		13		
3d Ba					14		
Bo,					15		
					16		
Tk Co	POPL		000L		17		
44					18		

Figure 59. Regimental message center log.

a. The left half of the log is the record of service-ability of electrical means of communication. Listed in the extreme left hand column are the units with which direct communication is maintained. In the next columns are entered the times at which communication becomes effective and ineffective. Since the log is opened at midnight, 0001 is entered for each unit in the "IN" (effective) or "OUT" (ineffective) columns for both radio (RAD) and wire (TP). This log is checked periodically by the communication chief and communication officer.

b. The right half of the log has a column of consecutive numbers used in assigning message center numbers to outgoing messages. When a number is assigned to a message, one diagonal line is drawn through that number. When a receipt or notification of transmission has been received for that message, an opposing diagonal line is drawn through the number. This indicates that the message has been receipted. Each successive outgoing message received at the message center is assigned the next unused number. In the "MEANS" column to the right, the means of communication selected for that message is entered. Information relating to the message that may serve to identify that message at a later time is entered in the "REMARKS" column. The log is picked up by the communication officer daily and is disposed of in accordance with the unit SOP. The message center chief makes a periodic check with all agencies of communication of units with which it is connected to insure that the log is current. Unit SOP usually prescribes that these agencies immediately notify the message center when communication is lost or reestablished with other units

8. MESSAGE CENTER LOG OPERATION DURING ECHELONMENT

a. When the command post moves in echelon, the echelon remaining at the old command post site retains the log being used and retains a specified number of message center numbers to be assigned to outgoing messages until the new command post opens.

Security midimanion

Experience will indicate the amount of numbers to be retained. When the new command post opens at the new location, the message center there assigns numbers from the new block; for example, 15 numbers have been used up to the time the forward echelon moves out for the new site. The chief decides that 10 numbers will be more than sufficient for the message traffic at the old command post site.

b. When the forward echelon opens the new command post, it assigns numbers starting with 26. If the numbers allotted the old message center are all used before the new command post opens, letters of the alphabet may be used in sequence, or a combination of letters and numbers may be used (such as 25A, 25B, etc.). If any of the numbers are unused at the old command post site, they should be marked off the log and a notation made on the log indicating that they were not used.

9. ROUTE DELIVERY LIST

The route delivery list is a Signal Corps form. It is normally used by a messenger who has several messages to deliver. The message center number or other means of identification is entered in the first column of the delivery list. Numbers of several messages being delivered to one addressee may be entered on one line. The time of dispatch (time of departure of the messenger) is entered in the blank space at the upper left of the route delivery list. Each addressee receipts for the messages received by entering his name in full in the middle column and



entering the time of receipt in the right column. When the delivery list is returned to the message center, the time of return is entered in the blank space on its upper right corner. The duplicate copies of the messages may then be attached to the delivery list and all placed in the dead file or the list may be disposed of in accordance with the unit SOP. The messenger's name may be entered at the upper right of the delivery list for reference.

10. MESSAGE ENVELOPE

The message envelope is another Signal Corps form. Like the delivery list, it is used as a receipt Both the route delivery list and the message form. envelope give a record of departure, time of receipt by the addressee, and time of return by the messenger. With this information, the message center chief or communication officer can check against delay time in the delivery of messages. In addition, the forms themselves serve as receipts. The addressee or his representative enters his signature on the RE-CEIVED line and, on the same line on the right, enters the time of receipt. The message center chief enters the time a messenger is dispatched and the time he returns. The messenger enters his name or initials on the face of the form for possible future reference. When the receipted envelope is returned, the duplicate of the message is placed in the envelope and the envelope is placed in the dead file or is disposed of according to the unit SOP.



11. DISPOSITION OF RECORDS

The code clerk's file is periodically turned over to the communication officer. He examines it and then normally destroys all material in it. The same action is taken with the radio operator's file. The dead file is periodically turned over to the S1 or sergeant major who periodically disposes of the material in it. Normally the dead file is not retained at message center longer than 24 hours. The writers of messages normally give the sergeant major an information copy of all messages given to message center for transmission; and they should give him a résumé of all telephone conversations for entry in the unit journal. The dead file gives the sergeant major a check to insure that all messages sent through the message center are entered in the journal.

Section IV. OPERATION

12. SECURITY REGULATIONS

- a. Message center personnel must know when and how to authenticate messages and must know when to encrypt them. They must observe the correct procedures and security precautions in encrypting. Even a minor error in the encrypting process may provide the enemy cryptanalyst or code expert with the information necessary to break the code.
- b. The following is a list (in order of security preference) of means of transmission for a message.
 - (1) Messenger.
 - (2) Wire.



- (3) Visual.
- (4) Sound.
- (5) Radio.
- c. See paragraph 92 for further discussion of communication security.

13. SELECTION OF MEANS OF COMMUNICATION

The following considerations govern the selection of means of communication:

- a. Messages to go only a short distance are normally sent by messenger.
- b. Maps, documents, photographs, and similar messages are sent by messenger unless equipment for facsimile is available.
- c. Short messages going a comparatively long distance are normally sent by electrical means.
- d. Whenever possible, a means other than telephone is used in order that the wire lines may be kept open for direct communication by the commander and his staff.
 - e. Long messages are normally sent by messenger.
- f. Messages sent by radio are subject to interception by the enemy and must be encrypted unless authorized to be transmitted in the clear.
- g. Routine reports are normally transmitted by means other than radio.
- h. If the importance and the situation warrant, a message may be sent by two or more means of communication.
- i. The degree of precedence assigned the message influences the decision as to which means to employ.

11

Security Imorniation

j. The relative speed of transmission of the various means of communication should be studied and a standard for comparison established to assist in determining the most rapid means to employ for each message. See FM 24-5 and FM 24-17 for further instructions.

14. COORDINATION OF MEANS OF COMMUNICA-TION

- a. The message center distributes outgoing message traffic among the various means (messenger, wire, radio, visual, and sound) to obtain the most efficiency and speed in handling and delivering message traffic.
- b. The message center chief coordinates the use of the various means of communication by selecting the most suitable and rapid means available for the transmission of any message. See FM 24-5 for further instructions

15. PROCESSING AND SERVICING MESSAGES

a. Processing. When a message is handed to the message center for transmission, the message center chief or clerk processes it. Processing consists of making entries across the top of the message form (Time Filed, Message Center No., and How Sent). Upon receiving the original and duplicate of the message, the clerk enters, in the "Time Filed" space on both copies, the time that he is handed the message. He then selects the next unused message center number from the message center log and enters this in the "MSG CEN NO" space in the center of the form on

both copies. He determines the best means of transmittal after checking his log, and enters his decision in the "How Sent" space. Time involved in processing and dispatching messages, exclusive of encrypting, should not exceed 2 minutes.

b. Servicing. When the message center chief receives a receipt or notification of transmission for a message transmitted by an electrical means, pigeon, or airplane pick-up, he enters the time of receipt and his initials on the face of the duplicate copy of the message and encircles both entries. Messages carried by messenger need not be serviced since the signature and time of receipt are on the envelope or delivery list.

16. FLOW OF MESSAGE TRAFFIC

Delay of delivery is constantly checked. All messages except those to be encrypted or those to go by scheduled messenger must stay in the message center no longer than a few minutes. Unpreventable delays are reported to the originators of such messages.

17. RELAY MESSAGES

a. In handling relay messages it is assumed that messages received in cryptographic form will be retransmitted without decrypting; however, if the addressee does not have the system in which the message was encrypted, the proper security steps must be observed if the message is to be retransmitted by electrical means. In addition the originator should be informed so that subsequent messages will be placed in the proper system.

b. In some cases, messages may be relayed by the agency receiving the message without being referred to the message center. However, if the message is received by one agency and forwarded to the addressee by means of another agency, the message may be given to the message center. The message center may process both copies received from the operator, assigning the message a number from the message center log. The entry of the word RELAY may be made in lieu of a message center number in the processing. By using a message center number, a positive check is assured on the receipt of the message by the addressee. The duplicate copy of a numbered relay message is handled in the same manner as that of other outgoing messages; the time of receipt by the addressee should be given to the station of origin.

18. PREPARATION OF SKELETON COPY

When only one copy of a message is given to the message center for transmission, the message center chief or clerk prepares a "skeleton copy" for use in the live and dead file. This is done by copying on a message form all entries from the original except the body of the message. Only a few of the first key words from the message text are copied; if there is an accompanying overlay, the word "overlay" is entered instead of text. The signature of the writer of the message is *printed* on the skeleton copy. The word SKELETON is placed on the face of the message.

19. USE OF MESSENGERS

Scheduled messengers operate on a fixed time and route schedule between a command and its subordinate units; they deliver to message centers. Special messengers are dispatched only when immediate delivery of the message is urgent; they deliver directly to the addressee or his representative. A representative may be authorized to receive messages for an addressee. In the regimental or battalion command post, the unit sergeant major is authorized to receive incoming messages for the commanding officer. See paragraph 85 for discussion on double messengers.

Section V. ROUTING OF MESSAGES

20. OUTGOING MESSAGE BY SCHEDULED MESSENGER

The message, in duplicate (original and one carbon copy), is given to the message center where the message is processed. The duplicate is placed in the live file and the original is sent to the distant unit message center where the outgoing messenger obtain a receipt (message envelope). Upon return of the receipt, the duplicate copy of the message is placed in the envelope and the envelope is placed in the dead file.

21. INCOMING MESSAGE BY SCHEDULED MESSENGER

The incoming scheduled messenger delivers the messages to the message center where they are receipted. The message center chief delivers the messages to the addressee (sergeant major or representative of the addressee).

22. OUTGOING MESSAGE BY SPECIAL MESSENGER

After processing the original and duplicate, the duplicate is placed in the live file and the original is sent by messenger to the addressee. There the messenger obtains a receipt. The messenger may go by way of the distant message center when entering the command post to learn where to find the addressee. He may return by way of the distant message center to pick up messages for his own unit. Upon return of the receipted envelope, the duplicate copy is taken from the live file, inserted into the envelope, and filed in the dead file.

23. INCOMING MESSAGE BY SPECIAL MESSENGER

The incoming special messenger delivers the message to the addressee or his representative and obtains a receipt. He may stop at the message center for information and directions.

Section VI. MESSAGES SENT BY RADIO, AIRPLANE, AND PIGEON

24. OUTGOING CLEAR TEXT BY RADIO

After processing the original and duplicate, the duplicate is placed in the live file and the original is sent directly to the radio section. The message is transmitted to the distant unit. Upon receiving the receipt from the distant station, the radio operator services the original copy of the message and places it in his radio operator's file. The radio operator notifies message center of the time of receipt. Upon



receiving this information, the message center chief removes the duplicate copy from the live file and services it. The message center chief or clerk enters on the face of the message the time of receipt (as given to him by the radio operator), the chief or clerk's initials, and encircles the entry. The duplicate is then placed in the dead file.

25. INCOMING CLEAR TEXT BY RADIO

The local radio operator receives the message and, using the message book, makes three copies. He then services the message and places one copy in his radio operator's file, and delivers the original and the other copy to the sergeant major.

26. OUTGOING ENCRYPTED TEXT BY RADIO

After processing the original and duplicate, the duplicate is placed in the live file and the original is given to the code clerk for encrypting. The code clerk prepares an original only of the enciphered text and destroys his work sheets. He places the original clear text in his code clerk's file and delivers the single encrypted message to the radio operator. The radio operator transmits the message and services it upon receipt. The radio operator then places the encrypted text in his radio operator's file and notifies the message center of the time of receipt. The message center chief takes the duplicate copy of the original message from the live file, services it, and places it in the dead file. The code clerk does not service messages in his code clerk's file.





27. INCOMING ENCRYPTED TEXT BY RADIO

When receiving a message, the radio operator makes an original and two carbon copies. (He will not know it is an encrypted message until after he has started filling the message form). When receipting for the message, he services the message form, places one carbon copy of the encrypted text in his radio operator's file, and delivers the original and other carbon copy to the code clerk. The code clerk decrypts the message (preparing one, two, or three copies in accordance with the unit SOP), destroys his work sheets and the carbon copy of the encrypted text, and places the original encrypted text (received from the radio operator) in his code clerk's file. The code clerk then delivers the clear text to the sergeant major. If the unit SOP prescribes it, the code clerk may get a receipt on a second carbon copy of the clear text when he delivers it to the addressee, giving it to the message center chief or clerk to hold for a period of time. The code clerk does not place in his clerk's file copies of messages he decrypts.

28. AIRPLANE PICK-UP

After processing and filing the duplicate message in the live file, the original is sent to the radio section, which operates the panel and pick-up grounds. After the message has been picked up by the airplane, and the pilot indicates by prearranged signal that he has the message in the cabin, the time of signal by the plane is noted and given to message center.

Security Tremation

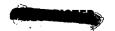
This is the time of receipt or pick-up. The message center chief removes the duplicate from the live file, services it, and places it in the dead file. See FM 24-5 for detailed instructions.

29. AIRPLANE DROP

The message is dropped from the airplane in a cannister with a long streamer attached. The cannister is usually dropped at the panel grounds where it is picked up by personnel of the radio section and taken unopened directly to the addressee or sergeant major. The cannister is later returned by scheduled messenger to the headquarters of origin. See FM 24-5 for detailed instructions.

30. OUTGOING CODED TEXT BY PIGEON

After processing the original and duplicate of a clear text message and filing the duplicate in the live file, the original is given to the code clerk who prepares two coded text copies—an original and a duplicate. The original clear text copy is filed in the code clerk's file and the two encrypted text copies are given to the person who is handling the pigeons. The first pigeon released carries the original of the encrypted text message. The second pigeon released carries the original of a second message and the duplicate of the first encrypted message sent by pigeon. The third pigeon carries the original of a third message and the duplicate of the second message, and so on. This improves the chance of the delivery of messages in case the previously released pigeon does





not arrive at its loft. If the pigeons are "doubled tossed," that is, if two pigeons are released together, one pigeon carries the original and the other pigeon the duplicate.

[AG 322 (17 Nov 52)]

BY ORDER OF THE SECRETARY OF THE ARMY:

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J. LAWTON COLLINS

WM. E. BERGIN Chief of Staff, United States Army Major General, USA The Adjutant General

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FM 7-25

C 2

FIELD MANUAL

HEADQUARTERS COMPANY, INFANTRY REGIMENT

Changes No. 2 DEPARTMENT OF THE ARMY WASHINGTON 25, D. C., 25 September 1952

FM 7-25, 21 August 1950, is changed as follows:

135. OBSERVER AND RECONNAISSANCE REPORTS

c. (Superseded) The final written report should be made by the patrol leader or the interrogation officer, depending upon the situation and the time available. Patrol reports, accompanied by an overlay or sketch, are prepared in the following form:

PATROL REPORT

RED-3	13 July 1952
DESIGNATION OF PATROL	DATE
TO: CO 14th Inf Regt	
MAPS: FRANCE and BELGIUM, 1:500,000,	
CALAIS. Sheet 38.	
A SIZE AND COMPOSITION OF PATROL	_

- B TASK: Proceed to railroad bridge at 749615 and determine if area is mined, condition of bridge, and if bridge is wired for explosives.
- C TIME OF DEPARTURE: 130930 July.

AGO 1012C—Sept. 200478 -52

-Securit Informati

TIME OF RETURN: 132114 July. D

ROUTES (OUT AND BACK): Followed south bank of \mathbf{E} railroad to objective

returned via. Ridge 110.

TERRAIN: (Description of the terrain-dry, swampy, F jungle, thickly wooded, high rocky: deepness of ravines and draws: type, size and strength of bridges, and their ability to carry armored and wheeled vehicles.)

> Generally hilly, area near bridge cut by deep ravines 4 to 15 feet deep, no water. Railroad OK, clear except for road block 50 vards E of bridge. Bridge made of steel and appeared to be in good condi-Through binoculars numerous wires could be seen running along sides bridge. Bridge believed to be prepared for demolition. Believe bridge could be used by vehicles, but might need planking.

ENEMY: (Strength, disposition, condition of defenses, G equipment, weapons, attitude, morale, exact location, movement, and any shift in dis-Time activity was observed: position. grid reference where activity occurred.)

- 8 En seen in positions near E end of bridge: at least 4 En on other side. One AT gun and one MG in position near bridge on W side covering road block. En moved about freely and position seemed to be disorganized.
 - (1) Time activity was observed 1310 to 1500
 - (2) Grid reference where activity occurred 749615



Security Third action

H ANY MAP CORRECTIONS: None.

J MISCELLANEOUS INFOR- Passed farm buildings at MATION: 738612 which appeared

to be vacant.

K RESULTS OF ENCOUNTERS (Enemy prisoners and WITH ENEMY: disposition; identifications; enemy casu-

cations; enemy casualties; captured documents and equipment.) None.

L CONDITION OF PATROL, INCLUDING DISPOSI-TION OF ANY DEAD OR WOUNDED: No casualties.

M CONCLUSIONS AND RECOM- (Including to what MENDATIONS: extent the task was

extent the task was accomplished and recommendations as to patrol equipment and tactics.) Patrol too large—

Patrol too large same task could have been accomplished with 3 men with less chance of being detected.

/s/C. R. STRONG, Sgt., Co A, 14th Inf

Signature, grade/rank and organization/unit of patrol leader

N ADDITIONAL REMARKS BY Patrol

INTERROGATOR:

that road block consisted of two fairly large boulders on railroad tracks. Patrol report verifies activity previously reported by air OP on 121300 Jul.

leader states

/s/R. B. JONES, 1st Lt, 14th Inf

Time

Signature, grade/rank and organization/unit of interrogator

3





O DISTRIBUTION: Sp 2.

Note. All entries in this report may be in long-hand.

[AG 322 (5 Sep 52)]

By order of the Secretary of the Army:

OFFICIAL:

J. LAWTON COLLINS

WM. E. BERGIN Chief of Staff
Major General, USA United States Army
The Adjutant General

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FM 7-25 C 1

FIELD MANUAL

HEADQUARTERS COMPANY, INFANTRY REGIMENT

CHANGES DEPARTMENT OF THE ARMY
No. 1 WASHINGTON 25, D. C., 22 October 1951

FM 7-25, 21 August 1950, is changed as follows:

4. DUTIES OF COMPANY HEADQUARTERS PERSON-NEL

b. The company executive * * * of the company. He is also the regimental chemical defense officer. His duties include—

(5) (Superseded) Advising the regimental commander in the offensive and defensive aspects of chemical, biological, and radiological warfare. For a detailed discussion of his duties as regimental chemical defense officer see FM 7-40.

37. RECORDS AND REPORTS

b. Observers and other persons submit shelling reports (SHELREP) and mortar reports (MORT-REP) to the counterfire information center. (See FM 6-130 for a detailed discussion of shelling re-



- ports.) Each shelling report or mortar report indicates its original source, the time of origin, and the location of the originator; the direction to the enemy weapon or its exact location, if known; the location of the shelling; the time and duration of the shelling; the number and type of weapons; and the number and type of shells. Each report also * * * left blank (fig. 6).
- c. All shelling reports, mortar reports, and sound locating reports are consolidated on the counterfire information form and passed to the artillery through the artillery liaison officer (fig. 7). They also are

 * * as described above.

* * * * * *

- c. (Added) Information about enemy bombing is reported without delay to the appropriate headquarters or center which can evaluate or act upon the information. This information is reported in the same form as are shelling reports (fig. 6). Bombing reports (BOMREP) provide valuable information to the intelligence sections of higher headquarters, both air and ground. They can be used to prepare enemy air order of battle studies and situation maps. After collation and analysis, they may indicate enemy air capabilities and intent as well as new developments, tactics, and doctrine.
- f. (Added) The report form shown in figure 6 is printed on the inside cover of field message books. (Field message books that do not have the form can





(Each report will be preceded by one of the following code words:
(1) SHEIREP, (2) MORTREP, or (3) BOMREP.)

ABLE - DANGER BLUE OF 0614

(From - unit, use current call sign or code name)

BAKER - 80369718

(Position of observer - map reference preferred (code if map reference is used))

CHARLIE - PIN POINT FLASH 6300

(Grid or magnetic (state which) bearing or azimuth of flash or sound or groove of shell (state which) in mils or degrees (state which) (omit for aircraft))

DOG ~ 0605

(Time shelling began)

EASY - 0608

(Time shelling ended)

FOX - 80389721

(Area shelled, mortared, or bombed (clear map reference preferred))

GEORGE - 2 MEDIUM

(Number and nature of guns, mortars, or aircraft.)

HOW - REGISTRATION

(Nature of fire (registration, bombardment, harassment, etc.) (Omit for aircraft))

ITEM - 2 SMOKE 9 HOW EASY

(Number and type of shells, bombs, etc.)

JIG - 5 SEC.

(Time of flash to bang (cmit for aircraft;)

KING - 3 CASUALTIES

Figure 6. (Superseded) ing and bombing reports.



					-		_
	¥	DAMAGE (REMARKS)		PW (2 ND LT.) SAW THESE GUNS AT 0415	3 CASUALTIES AREA SHELLED I' ON AN IMPORTANT ROUTE		Figure 7. (Superseded) Sample counterfire information form. (May be reproduced locally.)
	7	FL ASH ~ BANG SECONDS			S SEC.		ay be
	-	E NUMBER FLASH- B BANG TYPE OF SECONDS SHELLS	2 46		INTER- 2 SMOKE DICTION 9 HE		ı. (M
N FORM	I	NATUR OF FIRE	REGIS -		7NTCR- 060S 060S 80389727 2 MED. DKT10N		n forn
COUNTERFIRE INFORMATION FORM	G	NUMBER AREA B SHELLED TYPE OF GUNS	1 МЕО	4 MED	2 MED.		rmatiq
E INFO	L	AREA SHELLED		14854871	80389721		e in fo
RFIR	ш	TIME	0602		8090		erfir
ST	0	TIME	0601 0602		5090		ount
00	o	AZIMUTH OF SOUND, FLASH, OR FURROW			PIN POINT FLASH 6300 Å		Sample c
	8	POSITION OF OBSERVER (MAP COOR- DINATES)	80979690 (CONTROL TEAM)		803647/8		rseded)
	d	REPORTED BY & TIME	1ST CF SQD. 0610	I PW TEAM OGKS	DANGER BLUE OP 0614		edng)
		SHELLREP	*	9			Figure 7.
4						AGO	



be modified by printing this form on a piece of gummed paper and pasting it to the book cover.)
[AG 322 (8 Oct 51)]

By order of the Secretary of the Army:

OFFICIAL:

WM. E. BERGIN

Major General, USA

The Adjutant General

J. LAWTON COLLINS Chief of Staff United States Army

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(5); Log Comd (2); A (20); CHQ (5); D 7, 57 (5);

R 7 (5); Bn 7 (2); Sch (10); Mil Mis (1); ARMA (1); T/O & E 7-12N (10). SPECIAL DISTRIBUTION.

For explanation of distribution formula, see SR 310-90-1.



DEPARTMENT OF THE ARMY FIELD MANUAL FM 7-25

This manual supersedes FM 7-25, 7 October 1942, including C 1,
14 January 1944

HEADQUARTERS COMPANY INFANTRY REGIMENT



DEPARTMENT OF THE ARMY

AUGUST 1950

United States Government Printing Office Washington: 1950





DEPARTMENT OF THE ARMY, WASHINGTON 25, D. C., 21 August 1950

FM 7-25 is published for the information and guidance of all concerned.

[AG 322 (18 May 50)]

BY ORDER OF THE SECRETARY OF THE ARMY:

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EDWARD F. WITSELL

Major General, USA

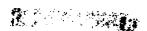
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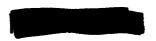
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CONTENTS

		Paragraphs	Page
CHAPTER 1.	GENERAL		
Section I.	Mission and organization	1–10	1
II.	Training	11–19	13
III.	Supply, maintenance, and		
	evacuation	20-26	17
CHAPTER 2.	COUNTERFIRE PLATOON		,
Section I.	General	27-38	22
II.	Technique	39–48	43
III.	Tactical employment	49-71	80
	-		
CHAPTER 3.	COMMUNICATION PLATOON		
Section I.	General	72 - 93	94
II.	Command posts	94–101	130
III.	Tactical employment	102–124	141
CHAPTER 4.	INTELLIGENCE AND RECONNAISSAI	NCE PLATOO	N
Section I.	General	125-131	172
II.	Intelligence technique	132-136	184
III.	Tactical employment		205
CHAPTER 5.	ANTITANK MINE PLATOON		
Section I.	General	160-164	226
II.	Technique	165-173	236
III.	Tactical employment	174–196	263
CHAPTER 6.	SECURITY PLATOON		
Section I.	General	197-200	290
II.	Technique	201–207	295
III.	Tactical employment	208-218	299
****	zacotoai empioyment	200 210	
APPENDIX I.	REFERENCES		306

		Paragraphs	Page
APPENDIX II.	TACTICAL TRAINING (BASIC UNIT	TRAINING)	
Section I .	Company headquarters, regi-		
	mental headquarters sec-		
	tion, and communication		
	platoon	1–12	311
II.	Counterfire platoon	13-23	329
III.			
	sance platoon	24 – 34	345
IV.			363
V.	Security platoon		383
APPENDIX III.	SAMPLE SOP FOR COUNTERFIRE		
	SQUAD TECHNIQUE		
Section I.	Installing sound locating equi	pment	397
II.			
III.	Surveying a counterfire wear	oon	401
IV.			404
APPENDIX IV.	DETAILED MESSAGE CENTER PROCE	DURE	
Section I.	Outgoing messages	*******	407
II.	Incoming messages		411
INIDEV			419



This manual supersedes FM 7-25, 7 October 1942, including C 1, 14 January 1944

CHAPTER 1

GENERAL

Section I. MISSION AND ORGANIZATION

- 1. PURPOSE AND SCOPE. This manual is a guide to the training and tactical employment of the headquarters company, infantry and airborne infantry regiments. For references, see appendix I.
- 2. MISSION. The headquarters company provides counterfire information, communication, intelligence, reconnaissance, and trained antitank mine personnel for the regiment. It provides security for the regimental command post, and administrative support for the command post personnel.
- 3. ORGANIZATION. a. The headquarters company, infantry regiment, consists of a company headquarters, a regimental headquarters section, a counterfire platoon, a communication platoon, an intelligence and reconnaissance platoon, an antitank mine platoon, and a security platoon. These units work under the supervision of the regimental staff and the headquarters company commander (fig. 1).
- **b.** The headquarters company, airborne infantry regiment, organization is similar to the head-

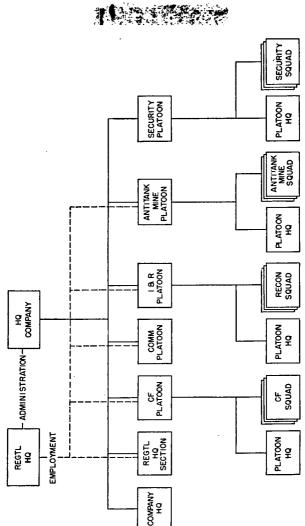


Figure 1. Functional chart, headquarters company, infantry regiment.

quarters company, infantry regiment. However, it does not have a security platoon (fig. 2).

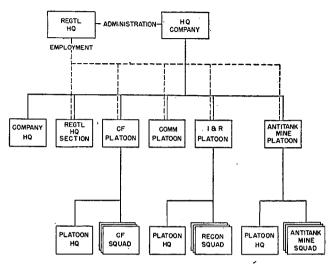


Figure 2. Functional chart, headquarters company, airborne infantry regiment.

4. DUTIES OF COMPANY HEADQUARTERS PERSON-NEL. a. The headquarters company commander commands his company. He is also the regimental headquarters commandant.

(1) By his character and skill he gives positive leadership to his company and maintains its discipline, welfare, and contentment. He actively supervises its training, its administration, and the procurement and maintenance of its equipment. He makes full use of the company's chain of command. In assigning duties

to his unit leaders, he considers their individual capabilities and personalities. To build his company elements into efficient and coordinated teams, he develops a high degree of initiative and personal responsibility in all his leaders.

- (2) He continually estimates the situation, having in mind all practicable courses of action. He starts action on any matter pertaining to his company. He follows this action through by vigorously executing the simplest effective course to accomplish his mission.
- (3) He uses all means at his command and requests additional means whenever they can be well used to accomplish his mission. Without awaiting orders he makes appropriate coordination with any other unit or agency.
- (4) In the battle area he uses liaison, personal reconnaissance, and the men available to him to maintain the security of the regimental command post and to prepare for future operations. He assigns definite missions to his subordinate leaders. He keeps himself informed on their actions and gives them assistance when they need it. He goes where he can best control and coordinate his company's actions.
- (5) He, alone, is responsible to his regimental commander for all that his company

does or fails to do. He is responsible for the administration, supply, and discipline of all men and units attached to his company. For his duties as regimental headquarters commandant, see FM 7-40.

- **b.** The company executive is second in command of the company. He is also the regimental gas officer. His duties include—
 - (1) Acting as assistant headquarters commandant.
 - (2) Making decisions in the company commander's absence.
 - (3) Helping the company commander to keep informed of company strength, morale, training, disposition, equipment, administration, and supply.
 - (4) Helping to prepare standing operating procedures (SOP).
 - (5) Advising the regimental commander in the use of chemicals and the defense against enemy chemicals. As regimental gas officer, he keeps the regimental commander informed as to the existence of biological and radiological hazards and the defense against them. He is assisted in his duties as regimental gas officer by selected gas noncommissioned officers in the headquarters company and other regimental units, according to FM 21-40. As gas officer, he has the following specific duties:

- (a) He supervises gas defense training (coordinated with the S-3).
- (b) He makes recommendations concerning the supply of chemical items and equipment for offensive and defensive action.
- (c) He supervises the use of decontaminating agents.
- (d) He supervises the gas reconnaissance of routes and areas before their use by troops.
- (e) He makes recommendations for the employment of chemicals and equipment.
- (f) He works with the S-2 to get information on types, characteristics, and methods of employment of enemy chemical agents and equipment.
- (g) He is assisted in performing his radiological defense duties by a minimum of one regularly appointed radiological defense monitor, who performs instrument surveys and obtains radiological data in areas contaminated, or suspected of being contaminated, with radioactive materials. Radiological defense monitors perform this duty in addition to their primary duty assignments.
- c. The unit administrator is a warrant officer. He assists the company commander in handling

the administrative details within the company. His duties include supervising preparation of the morning report, sick report, duty roster, records and reports on the operation, maintenance and supply of company motor vehicles, and other administrative and supply records.

- d. The first sergeant is the principal enlisted assistant to the company commander. He helps the company commander in commanding the company enlisted men. He is selected especially for his leadership ability, loyalty, personality, dependability, administrative knowledge, accuracy, and thoroughness. By means of his close observation and judgment of the men, he knows their personal characteristics. He makes recommendations to the company commander concerning their welfare. Under the supervision of the unit administrator, he performs administrative duties, including the preparation of company records and reports.
- e. The mess steward, the assistant mess steward, the cooks, and the food service apprentices receive, prepare, and distribute rations. They operate the regimental headquarters and headquarters company kitchen. The mess steward, under the company mess officer's supervision, maintains and prepares the mess records and reports, and supervises the preparation and serving of food. He arranges for rations to be provided and delivered to the company's detached units. His duties also include—
 - (1) Training mess personnel.
 - (2) Assisting headquarters company com-

- mander by drawing, preparing, and distributing class I supplies (food and water).
- (3) Preparing and delivering meals to the regimental headquarters and headquarters company.
- (4) Arranging with other unit messes to feed detached elements of headquarters company, when necessary.
- (5) Feeding any men of other units who may be working with headquarters company.
- f. The supply sergeant receives, stores, maintains, issues, and turns in supplies and equipment for the company. Under the company supply officer's supervision, he prepares and maintains organizational and individual supply records. He supervises the company armorers.
- . **g.** The *company clerk* assists the first sergeant in his administrative duties.
- h. The motor sergeant is responsible to the company commander for the organizational maintenance and operation of the motor vehicles assigned to the company. His duties include—
 - (1) Conducting driver training.
 - (2) Supervising maintenance.
 - (3) Preparing and maintaining records and reports on the operation, maintenance, and supply of motor vehicles in the company. For detail of vehicle maintenance, see FM 7-30.

- (4) Supervising the loading and movement of transportation assigned to company headquarters.
- i. The automotive mechanics operate under the supervision of the motor sergeant. They supervise driver maintenance and perform organizational maintenance.
- j. The *company armorers* operate under the supply sergeant's supervision. They make repairs on small arms and other company equipment, except motor vehicles and signal equipment. Maintenance is performed according to the technical manual pertaining to each item of equipment.
- k. The *Orderlies* serve the regimental commander and the staff. They perform housekeeping tasks to free the commander and his staff to carry out their own duties. They are trained to take part in the defense of the command post.
- I. The *bugler* sounds calls, warnings, and alerts as ordered. He is trained as a messenger, and he takes part in the defense of the command post. He performs other duties as ordered by the company commander.
- m. The *truck drivers* operate the vehicles assigned to the company. They perform driver maintenance and assist the automotive mechanics in performing company maintenance on their vehicles.
- n. The filler personnel help other elements of the company as directed by the company com-

mander. When vacancies exist in the platoons, company headquarters, and regimental head-quarters section, they are assigned to fill these vacancies.

- 5. REGIMENTAL HEADQUARTERS SECTION. This section consists of enlisted men who work at the regimental headquarters.
 - a. The sergeant major's duties include-
 - (1) Supervising the enlisted men in the regimental command post.
 - (2) Assisting the regimental executive and the adjutant (S-1).
 - (3) Helping the adjutant to supervise the preparation and maintenance of the unit journal.
 - (4) Supervising the circulation of messages within the command post.
 - (5) Preparing and routing correspondence, and submitting all outgoing correspondence to the S-1 for approval and signature.
 - (6) Maintaining a policy file for the regional staff.
 - (7) Maintaining a reminder file for the staff.
 - (8) Supervising the maintenance of current files.
 - (9) Preparing the regimental administrative bulletin for the S-1 and supervising its distribution.
- **b.** The *intelligence sergeant* assists the regimental intelligence officer (S-2). His duties include—

- (1) Helping to supervise the collection of information.
- (2) Entering incoming information in the S-2 work sheet.
- (3) Posting enemy and terrain information on the situation map.
- (4) Supervising clerks and draftsmen in preparing, reproducing, and distributing intelligence plans and reports.
- (5) Helping to disseminate intelligence.
- (6) Helping with intelligence training.
- c. The operations sergeant assists the regimental operations officer (S-3). His duties include-
 - (1) Posting friendly information on the situation map.
 - (2) Supervising the work of the draftsmen and clerks in the preparation, reproduction, and distribution of reports and written orders.
 - (3) Supervising the other enlisted men in the S-3 section.
- d. The headquarters clerks and the stenographer do clerical and stenographic work for the regimental commander and his staff. One of the clerks keeps the unit journal.
- e. Troop information and education personnel assist the regimental troop information and education officer (assistant S-3).
- f. The *chaplains' assistants* aid the chaplains in their duties. They are also trained as drivers.

- g. The draftsman's duties include-
 - (1) Preparing plans and drawings from oral or written instructions or sketches.
 - (2) Making finished drawings to scale.
 - (3) Assisting in keeping the situation map.
 - (4) Assisting in preparing orders, reports, and overlays.
- **h.** The *topographic draftsman* prepares map substitutes from notes, aerial photographs, or maps. He works with the draftsman.
- i. The athletic instructor assists the regimental athletic and recreation officer (assistant S-1). He supervises and instructs classes in the fundamentals of competitive athletics and physical exercises. He supervises and coaches athletic teams.
- j. The entertainment specialist assists the regimental athletic and recreation officer. He helps to plan, organize, and direct entertainment programs for the regiment.
- 6. COUNTERFIRE PLATOON. The counterfire platoon is the regimental agency for counterfire information. It sound locates enemy weapons, provides counterfire information, and also may help counterfire weapons to adjust fire. The regimental S-2 supervises the platoon's use. For its organization, training, and use, see chapter 2.
- 7. COMMUNICATION PLATOON. The communication platoon provides communication within the command post, to the battalions, to the other units of the regiment, and to attached units. The

regimental communication officer supervises its use. For its organization, training, and use, see chapter 3.

- 8. INTELLIGENCE AND RECONNAISSANCE PLATOON. The intelligence and reconnaissance platoon obtains information by reconnaissance and observation. It maintains contact with the enemy and with friendly reconnaissance and security units. The regimental S-2 supervises its use. For its organization, training, and use, see chapter 4.
- 9. ANTITANK MINE PLATOON. The antitank mine platoon lays mines, breaches or removes mine fields, uses demolitions, and does other pioneering work. It provides men to help the battalions in mine operations. The regimental S-3 supervises and coordinates its use with the regimental antitank officer (tank company commander). For its organization, training, and use, see chapter 5.
- 10. SECURITY PLATOON. The security platoon of the infantry regiment is used to guard the regimental command post. It also is trained for military police duties. The headquarters company commander controls its use. For its organization, training, and use, see chapter 6. There is no security platoon in the airborne infantry regiment.

Section II. TRAINING

11. GENERAL. a. The headquarters company training objective is to prepare all company elements to perform their missions, and to perfect team-

work between these elements and other units. The training program is divided into phases. These include basic military training, advanced individual training, basic unit training, advanced unit training, combined training, and joint training. The training covered in this manual is primarily unit training. Basic military training is generally the same in all infantry units. Advanced individual training is a continuous process. Unit training begins when the men in each squad and larger unit have become proficient in basic military training and have progressed enough in advanced individual training to learn to work together as a team. In airborne units, parachute and glider qualifications usually are completed during advanced individual training.

- b. Basic unit training includes squad and platoon training. The scope and procedure for basic unit training are outlined in appendix II. Advanced unit training includes battalion and regimental training. Combined training (combined arms training) and joint training begin when the regiment, as a whole, has achieved proficiency in basic and advanced unit training. Combined training integrates the infantry training with units of the other ground arms and usually begins before joint training. Joint training teaches the army, navy, and air force units to cooperate with each other during joint operations.
- c. Applicatory exercises are used during all training phases. During basic and advanced unit training, the applicatory exercises include com-

mand post exercises (CPX's) and tactical field exercises. During combined and joint training, the applicatory exercises include CPX's and maneuvers.

- 12. TRAINING RESPONSIBILTY. a. The headquarters company commander is responsible for his company's training. He makes sure that his platoon leaders are qualified to conduct their platoon training. The scope and allotment of training time for each company element conform to the regimental commander's training directives. Training of all drivers in the operation and maintenance of their vehicles is conducted under headquarters company supervision. The company commander's training duties include—
 - (1) Preparing training schedules, records, and reports.
 - (2) Planning, organizing, and supervising training.
 - (3) Selecting officers and enlisted men to attend regimental, division, and service schools, and arranging for them to attend.
- b. Regimental staff officers give advice and assistance during training of the counterfire, the communication, the intelligence and reconnaissance, and the antitank mine platoons. They supervise and conduct on-the-job training for the men of the regimental headquarters section.
- c. Each platoon leader is responsible to the headquarters company commander for his platoon's conduct and status of training.

- 13. COMPANY HEADQUARTERS. The company executive, the first sergeant, the supply sergeant, the mess steward, and the motor sergeant assist the company commander in training the company headquarters. The company commander designates company officers to help him supervise the company supply, mess, and transportation. During basic and advanced unit training, the men train on the job and take part in applicatory exercises (sec. I, app. II).
- 14. REGIMENTAL HEADQUARTERS SECTION. During basic and advanced unit training the staff groups in the regimental headquarters section train on the job. Each regimental staff officer is responsible for on-the-job training of the men in his section. He arranges for his section to participate in general training and appropriate applicatory exercises with the headquarters company (sec. I, app. II).
- 15. COUNTERFIRE PLATOON. The regimental S-2 gives advice and assistance on training in the counterfire platoon. The platoon leader recommends to the headquarters company commander the use of training time for his platoon, and conducts training for his platoon (sec. II, app. II).
- 16. COMMUNICATION PLATOON. The regimental communication officer gives advice and assistance on training in this platoon. The communication platoon leader makes recommendations to the company commander for the use of training time for his platoon, and conducts training in his platoon (sec. I, app. II).

- 17. INTELLIGENCE AND RECONNAISSANCE PLATOON. The regimental S-2 gives advice and assistance on training in the intelligence and reconnaissance platoon. The intelligence and reconnaissance platoon leader recommends to the company commander the use of training time for his platoon, and conducts training in his platoon (sec. III, app. II).
- 18. ANTITANK MINE PLATOON. The regimental S-3 gives advice and assistance on training in the antitank mine platoon. The antitank mine platoon leader recommends to the company commander the use of training time for his platoon, and conducts training in his platoon (sec. IV, app. II).
- 19. SECURITY PLATOON. The security platoon leader recommends to the company commander the use of training time for his platoon. Security platoon training includes both security training and military police training. The headquarters company commander arranges with the regimental S-3 for police training with other regimental units and the division military police company (sec. V, app. II).

Section III. SUPPLY, MAINTENANCE, AND EVACUATION

20. GENERAL. The headquarters company commander supervises the mess, supply, and maintenance of the company. His officers and the administrative enlisted men of the company headquar-

ters assist him in these duties. The company aid man and the regimental medical company provide medical services.

- 21. HEADQUARTERS AND HEADQUARTERS COM-PANY MESS. The mess steward is responsible to the headquarters company commander for the operation of the headquarters company mess. When the kitchen operates from the regimental train bivouac, he works under the service company commander's direct supervision.
- 22. COMPANY SUPPLY. a. The headquarters company commander, assisted by his officers, the warrant officer (unit administrator) and the supply sergeant, keeps himself informed of the company's supply status of clothing and equipment. He requests replacement items from the regimental S-4. When practicable the worn or damaged items to be replaced are sent with these requests. The supply sergeant draws and delivers replacement items to the platoons or the men for whom they are requested. For signal supply, see paragraph 80.
- **b.** The company supply sergeant is the head-quarters company commander's principal assistant in procuring and distributing all company supplies except rations, water, motor parts, fuel, and lubricants. He operates in the company area or with the regimental trains, and is assisted by the company armorers.
- 23. AMMUNITION SUPPLY. The headquarters company commander controls the amount of ammuni-

tion carried in the company, according to the situation and directives from higher commanders. The supply sergeant issues small arms ammunition to the company elements and replenishes the basic load of ammunition. When necessary, the platoons draw additional grenades, mines, pyrotechnics, and explosives from the ammunition supply points with their own transportation.

- **24. TRANSPORTATION AND AUTOMOTIVE MAINTENANCE.** a. The *motor sergeant* is the principal transportation assistant to the headquarters company commander. He assists in the operation, control, and supply of company transportation, the training and operation of drivers and mechanics, and motor vehicle maintenance.
- **b.** Transportation is provided in the headquarters company for all company equipment except the mess equipment, which is carried on transportation assigned to the service company. The company motor sergeant is responsible to the headquarters company commander for maintaining the supply of gasoline and lubricants. A reserve of class III supplies is carried on the company maintenance truck. Reserve containers for gasoline are obtained by taking some of the 5-gallon drums from other vehicles. Normally, one truck goes to the regimental class III supply point with empty drums. These drums are refilled, and a resupply of lubricants is drawn at the same time. Company drivers normally refill their vehicles from these drums, and they obtain a resupply of lubricants at the company maintenance truck. Individual

vehicles going to the rear also may be resupplied at any class III supply point.

- c. Automotive maintenance of headquarters company vehicles is supervised by the company motor sergeant. The drivers perform driver maintenance on their vehicles. In addition to class III supplies, the company maintenance truck carries tools and spare parts. Company automotive mechanics normally perform organizational maintenance near the maintenance truck in the motor park. Vehicles that cannot be repaired by company mechanics are evacuated to the regimental truck maintenance section which is usually with the regimental trains.
- 25. EVACUATION OF CASUALTIES. a. Casualties requiring medical attention are given emergency medical treatment by the company aid man. When a medical officer is needed, a casualty is evacuated to the regimental collecting station. Evacuation is by litter, unit vehicles, or ambulances of the medical company collecting platoon. Within a battalion area, the nearest medical installation handles the headquarters company personnel.
- **b.** The headquarters company aid man belongs to the regimental medical company. However, he accompanies the headquarters company in the field at all times. His duties include—
 - (1) Administering emergency medical treatment.
 - (2) Informing the sick and walking wounded of the collecting station's location and the route to it.

- (3) Placing seriously wounded men in defiladed locations along a route where the collecting platoon can find them.
- (4) Tagging the dead and marking their location when practicable.
- (5) Notifying the collecting station of the headquarters company location, anticipated moves, and the location and number of casualties in his area.

26. RECOVERY AND SALVAGE. The company commander and all his leaders are responsible for battlefield recovery of equipment and matériel abandoned by friendly troops or captured from the enemy. Matériel that cannot be collected is reported to the regimental S-4. The report includes type, quantity, and location. New types of enemy matériel are reported to the regimental S-2. Items which cannot be moved, and which are believed to be important are guarded until they can be turned over to competent technical specialists. Company salvage is received and evacuated by the company supply sergeant through normal supply channels on vehicles going to the rear.

CHAPTER 2

COUNTERFIRE PLATOON

Section I. GENERAL

- **27. ORGANIZATION.** The counterfire platoon consists of a platoon headquarters and three counterfire squads.
- **a.** The *platoon headquarters* consists of a platoon leader, a platoon sergeant, and a radio repairman.
- b. Each counterfire squad consists of a squad leader (chief operator), an assistant squad leader (operator), two computers, and two plotters. The squad is divided, for sound locating operations, into two teams. The chief operator, one computer, and one plotter are in one team. The operator, one computer, and one plotter are in the other team.

28. DUTIES OF PERSONNEL. a. Platoon headquarters.

(1) The platoon leader is also the regimental counterfire information officer. As platoon leader he is responsible to the head-quarters company commander for the administration, discipline, welfare, and conduct of training and operations in the counterfire platoon. As a regimental special staff officer he is responsible to the

- regimental commander (through the S-2) for the planning and coordination of counterfire information training and functioning in the regiment. He operates the regimental counterfire information center under the supervision of the regimental S-2.
- (2) The platoon sergeant assists the platoon leader in controlling the platoon and coordinating counterfire information operations. He replaces the platoon leader during his absence. He helps the platoon leader collect and record counterfire information.
- (3) The radio repairman operates in the regimental command post area. His duties include—
 - (a) Assisting the platoon leader and the platoon sergeant.
 - (b) Maintaining the sound-locating equipment and other items of signal equipment with the maintenance equipment provided.
 - (c) Establishing and operating a battery charging point and an equipment repair place at a location selected by the counterfire platoon leader.
 - (d) Carrying extra batteries and the spare parts chest when truck transportation is not used.
 - (e) Collecting discharged batteries from the squads, charging them, and returning them to the squads.

- (f) Making periodic inspections of all spare parts, supplies, and accessories.
- (g) Preparing requisitions for parts and equipment.
- (h) Assisting the counterfire information officer at the counterfire information center.

b. Counterfire squad.

- (1) The squad leader is responsible to the platoon leader for training, discipline, operations and equipment of the squad. His duties also include—
 - (a) Acting as operator in the control team and as chief operator for the squad.
 - (b) Seeing that accurate data is reported promptly to the counterfire information center as sound locating reports.
 - (c) Acting as a radiotelephone operator when necessary.
- (2) The assistant squad leader is the second in command of the squad. His duties include—
 - (a) Acting as operator of the other team.
 - (b) Seeing that accurate data is reported properly to the computer of the control team.
 - (c) Acting as a radiotelephone operator, when necessary.
- (3) Each computer's duties include-
 - (a) Assisting the squad leader or the assistant squad leader in transporting, installing, and surveying the equipment.

- (b) Computing the azimuth to the targets, using data obtained from the recorder.
- (c) Recording data on the data sheet.
- (d) Acting as a radiotelephone operator.
- (e) The computer at one team gives data to the computer at the control team. The computer at the control team gives the data from both teams to the control team plotter.
- (4) Each plotter's duties include-
 - (a) Assisting the squad leader or the assistant squad leader in transporting, installing, and surveying the equipment.
 - (b) Plotting the data from both teams, and reporting it to the counterfire information center when his team is the control team.
 - (c) Acting as a radiotelephone operator or as a driver.

29. ARMAMENT, EQUIPMENT, MAINTENANCE, AND SUPPLY. All personnel of the counterfire platoon are armed with carbines. Each squad has a truck and trailer. Each squad has a sound locating set consisting of two microphone arrays of three microphones connected by an electrical cable to a recorder, sound powered telephone sets, computers, aiming circles, plotting boards, power unit (battery), and portable pack radiotelephones. Maintenance equipment for the sound locating sets is in the counterfire platoon headquarters. The platoon headquarters maintains the sound locating

equipment for the counterfire squads. The company headquarters maintains all other organizational equipment and individual weapons, and it usually performs all resupply. However, when a counterfire squad is located nearer to the supply facilities of another unit for an extended period, the counterfire platoon leader may arrange for items which are expended continuously, such as ammunition, rations, water, fuel, and clothing to be supplied by the appropriate battalion or separate company of the regiment. See FM 7-30.

- 30. COUNTERFIRE, COUNTERMORTAR, AND COUNTERBATTERY. a. Infantry counterfire operations include all measures initiated by the infantry to attack, by fire, enemy close support weapons. These include countermortar activities (FM 6–130) as well as activities against other enemy close support weapons, including direct fire weapons. Infantry counterfire operations and artillery countermortar activities are coordinated by the infantry regimental S–3 and the artillery liaison officer.
- b. Division countermortar activities include all infantry and artillery countermortar activities within the division. Artillery countermortar activities are measures taken by the artillery to attack, by fire, enemy mortars and rocket launchers. Over-all coordination of division countermortar activities is the responsibility of the division artillery commander. Thus, the artillery commander coordinates countermortar activities of the artillery plus those infantry counterfire operations

that are directed against enemy mortars and rocket launchers (indirect fire weapons). He does not coordinate other infantry counterfire operations against enemy direct fire weapons. However, the infantry may request artillery fire to neutralize enemy direct fire weapons (FM 6-130).

c. Artillery counterbattery operations differ from countermortar and counterfire operations by being directed against enemy artillery, exclusively.

31. REGIMENTAL COUNTERFIRE INFORMATION. a. Counterfire information includes all information which contributes to the accurate location of enemy close support weapons. It is the basis for effective counterfire operations.

- **b.** The *regimental S-2* supervises the collection, evaluation, and dissemination of counterfire information. This information is assembled and evaluated by the regimental counterfire information officer at the regimental counterfire information center. The counterfire platoon leader is the regimental counterfire information officer.
- c. The regimental counterfire information officer is responsible for notifying the S-3 promptly whenever counterfire information indicates the location of a counterfire target. Based upon information from the counterfire chart, he also may recommend to S-3 the most appropriate counterfire weapon for each counterfire target. He deals directly with the S-3, and keeps the S-2 informed. The S-3 uses this information to employ the most appropriate fires against each counterfire target.
 - d. The regimental counterfire information cen-

ter consists of the counterfire information officer; his means of communication with the counterfire squads, the battalions, and the heavy mortar company; the counterfire information form; the shelling report overlay; the suspect overlay; the counterfire chart; and the two enlisted men of the counterfire platoon headquarters, whenever they are not employed elsewhere.

- **32. REGIMENTAL COUNTERFIRE OPEATIONS.** a. The *counterfire platoon* furnishes information to help supporting weapons gain fire superiority over the enemy's close support weapons.
- **b.** The *effectiveness* of counterfire operations depends upon the speed and flexibility with which the most appropriate counterfire weapon is selected to engage each counterfire target. Speed and flexibility depend on obtaining information in the counterfire center. Information of the number, type, and disposition of enemy weapons must be timely, accurate, and complete to be of value in regimental counterfire operations.
- c. All three squads of the counterfire platoon conduct sound locating operations under regimental control. The squads furnish information direct to the regimental counterfire information center. This is the *normal* method and usually assures the greatest flexibility and effectiveness of regimental counterfire operations. This method is used whenever the counterfire squads can furnish adequate, accurate, and timely information and maintain communication with the regimental counterfire information center. (For normal

counterfire information center wire and radio circuits, see figs. 3 and 4.)

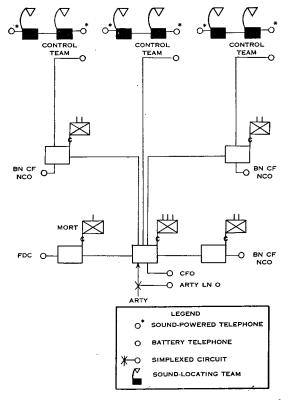


Figure 3. Schematic diagram of normal counterfire information wire circuits.

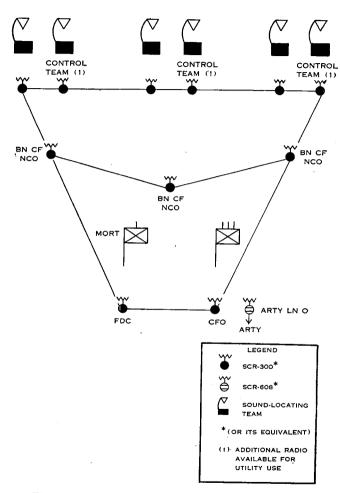


Figure 4. Schematic diagram of normal counterfire information radio circuits.

- d. Operations may be decentralized when frequent displacement is necessary, when it is impossible to survey counterfire squad locations. or when inadequate communication prevents sound locating operations from being conducted effectively under regimental control. When control is decentralized, one or more counterfire squads may be attached to each front line battalion, to the heavy mortar company, or to the heavy mortar platoons. Situations that dictate decentralized sound locating operations also may make it necessary for one or more counterfire squads to report counterfire information directly, either to a fire direction center or to selected counterfire weapons. This relationship between the counterfire squads and the counterfire weapons is classified either as close association or immediate association. The techniques used when counterfire squads operate in close association or immediate association with counterfire weapons are covered in detail in section II of this chapter. When a counterfire squad is in immediate association or in close association with only one counterfire weapon unit, it may be attached to that unit.
- 33. BATTALION COUNTERFIRE INFORMATION AND OPERATIONS. a. Each battalion staff processes counterfire information by a procedure similar to that used in the regimental staff. Each battalion counterfire noncommissioned officer operates a counterfire information center under the supervision of the battalion S-2. He also assists the battalion S-3 in counterfire and countermortar

matters. Whenever possible, he passes all counterfire information to the regimental counterfire information center.

- **b.** When *counterfire operations* are decentralized to battalions, the battalion counterfire noncommissioned officer furnishes timely counterfire information to the battalion S-3, makes recommendations concerning the employment of counterfire weapons to the battalion S-3, and passes information to the regimental counterfire information center. Each battalion counterfire noncommissioned officer may keep a counterfire chart, overlays, and a counterfire information form.
- 34. COUNTERFIRE INFORMATION AGENCIES. All men in infantry units are trained to report counterfire information. Each battalion, the heavy mortar company, the counterfire squads, the intelligence and reconnaissance platoon, and other regimental units report all counterfire information as they get it. The direct-support artillery, cooperating tactical aircraft, photo-interpretation specialists and prisoner of war interrogation teams also give counterfire information to the infantry regiment when they have it.
- **a.** Each *battalion* has a counterfire noncommissioned officer. He collects counterfire information from the companies of the battalion, the battalion observation posts, and the battalion artillery liaison officer. He reports it to the regimental counterfire information center.
- **b.** The *heavy mortar company* reports counterfire information direct to the regimental counterfire information center.

- c. Counterfire squads report counterfire information in the form of sound locating data to the counterfire information center by the fastest means of communication available.
- d. The intelligence and reconnaissance platoon obtains information of enemy weapons by observation and reconnaissance. This information is reported to the regimental S-2 or to the counterfire information center.
- e. Other regimental units report counterfire information to the counterfire information center by the best means available.
- f. The artillery liaison officer with regimental headquarters gives the counterfire information center any counterfire information he has.
- g. Reconnaissance reports from air observers which contain information of enemy weapons are relayed to the counterfire information center by the regimental S-2.
- h. Photo-interpretation specialists locate enemy weapons by means of aerial photographs. The regimental S-2 relays this information to the counterfire information center.
- i. Prisoner of war interrogation specialists pass any counterfire information obtained from prisoners of war and civilians to the counterfire information center or to the regimental S-2.
- 35. INFANTRY COUNTERFIRE WEAPONS. a. Any infantry weapon that can destroy or neutralize enemy close support weapons by firing on them may be an infantry counterfire weapon. Infantry counterfire weapons usually fire counterfire mis-

sions against unobserved enemy weapons. Mortars can deliver accurate, indirect fire against enemy weapons in concealed defiladed positions. The 4.2-inch mortar of the heavy mortar company is the principal counterfire weapon of the infantry regiment.

- b. Counterfire missions include precision fire, area fire, and adjustment. Precision fire missions and some area fire missions require accurate target data. Other area fire missions and adjustment may be executed with target data that is not accurate, such as data obtained by a counterfire squad that has not been surveyed. When helping an infantry counterfire weapon to adjust fire, a counterfire squad furnishes approximate target data initially, then senses the difference between the target and the shell burst locations, and reports these sensings to the counterfire weapon.
- c. The infantry counterfire weapons can use, and the counterfire squads can furnish, accurate target data for precision fire only when their own positions are surveyed. When these surveys are not practicable, the counterfire squads may assist infantry counterfire weapons to engage unobserved targets by the rapid method of fire adjustment. This method of adjusting fire is used when the counterfire squads are in close association with selected counterfire weapons. The rapid method of fire adjustment is covered in paragraph 46.
- d. Artillery is also a counterfire weapon. Although artillery counterfire missions normally are requested by the infantry regimental S-3 through the artillery liaison officer, they also may be re-

COUNTERFIRE INFORMATION PLAN

Effective date and hour.....

Counterfire	Location	Date to commence operations	Date-hour of Reports	Location of base survey point	Area of responsibility	Remarks
st CF Sqd	[RT 06160539 [LT 05560578	H-3	As obtained.	06160539	720-6220 mils	Regimental control.
ed CF Sqd	RT 07160509 LT 06540541	f H-3	do.	07160509	1080–60 mils	Do.
3d CF Sqd	(RT 08090442 LT 07450487	} H-3	do.	08090442	1440-200 mils	Do. Funhesis placed on enoug
2d Bn	06540505	99 H	do.			activity to immediate
& R Platoon	05790478	H-6	do		As directed	Regimental control. Special attention to nos-
IPW Team	05790478	9-H	qo		do.	Determine mortar loca-
Lt Avn Sec.	04330026		do.		0807 east to	Emphasis placed on Arty and Mort positions.
		H-3			1009 and west	4
PI Team	04330026	H-6	Daily at		Front	Verify enemy weapons
Factical Air		H-6	1200 nrs.		As requested	
Jommand.	05710551			05710561	See Operations	Mortar company control.
Hy Mort Co.	06430510			06500520	Order No. 16.	Do.
d Plat	05650444			05740450	do.	Do.
Kort Plat, Co H	05280431 05840579 06590528			05180469 05800585 06610532	do.	

Figure 5. The regimental counterfire information officer may use a form similar to this one in making his counterfire information plan.

quested by front line units through the artillery forward observers or the artillery liaison officers with the battalions.

- 36. THE COUNTERFIRE INFORMATION PLAN. a. The regimental counterfire information officer makes a counterfire information plan. Based upon his plan, he makes recommendations to the regimental S-2 for the use of the agencies of counterfire information and to the S-3 for the employment of counterfire weapons. He may use a form such as the one suggested in figure 5 for this plan.
- b. The counterfire information officer lists the location and the use of all counterfire information agencies. He anticipates whether the counterfire squads will be able to operate under regimental control. He determines what counterfire weapons may be used during each operation, and he knows the area of responsibility and the location of the base survey point of each regimental counterfire weapon. He knows when each agency of counterfire information goes into operation and the time each counterfire weapon occupies its firing position. He prescribes the time and frequency of minimum routine reports for all counterfire information agencies.
- 37. RECORDS AND REPORTS. a. The regimental counterfire information officer keeps a counterfire information form, a shelling report overlay, a suspect overlay, and a counterfire chart at the regimental counterfire information center. The counterfire chart is an accurate map or map substitute

of the counterfire operations area. It usually has a scale of 1:25,000 or larger, and is gridded. The shelling report overlay and the suspect overlay are registered to the counterfire chart.

- **b.** Observers and other persons submit shelling reports to the counterfire information center. (See FM 6-130 for a detailed discussion of shelling reports.) Each shelling report indicates its original source, the time of origin and the location of the originator; the direction and estimated distance to the enemy weapon or its exact location, if known: the location of the shelling: the time and duration of the shelling; the number and type of the weapons; and the number and type of shells. Each report also contains a tactical description of the shelling, such as registration firing, reconnaissance by fire, neutralization, interdiction, concentrations, and barrage fires; the effect or damage: the elapsed time between muzzle flash (if observed) and muzzle report; and any other information obtained. Each lettered item in the shelling report corresponds to a lettered column in the counterfire information form. These reports may be fragmentary. When the information for any item and column cannot be determined. the letter for this item is omitted from the shelling report and the corresponding space in the counterfire information form is left blank (fig. 6).
 - c. All shelling reports and sound locating reports are consolidated on the counterfire information form and passed to the artillery through the artillery liaison officer (fig. 7). They also are plotted on the shelling report overlay. When one

SHELLING REPORT NO. 1

- DANGER BLUE OP 0614 ABLE (Original source and time of origin) -80369718BAKER (Location of reporting agency) CHARLIE - PIN POINT FLASH 6300 (Method used and estimated distance to enemy weapon) DOG - FLASH BANG 1850 (Method used and estimated distance to enemy weapon) _ 80389721 EASY (Location of shelling) -0605FOX (Time shelling ended) HOW - 2 MIKE (Number and type of enemy weapons) - 2 SMOKE 9 HOW EASY ITEM (Number and type of shells) JIG - INTERDICTION (Type of fire) - 3 CASUALTIES KING (Damage) (not sent by radio in the clear) - 5: AREA SHELLED IS ON AN IMPOR-LOVE TANT ROUTE

Figure 6. A method of submitting shelling reports.

(Flash-bang seconds; or remarks)

or more reports substantiate the location of enemy weapons, these locations are transferred to the suspect overlay. As each suspect location is confirmed by additional shelling reports or other means, it becomes a counterfire target and is transferred to the counterfire chart. This chart furnishes information which the counterfire information officer gives to the S-3, reports to higher headquarters, and disseminates, without

											_
	TONE	FLASH-BANG SECONDS OR REMARKS		PW(20LT)SAW THESE GUNS AT Ø415	DICTION CASUALTIES PROCESSANT						-
COMPERSIRE INFORMATION FORM	SNIX	DAMAGE			3 CASUALTIES						•
	SIC	TYPE OF FIRE	REGIS- TRATION		2 SMOKE INTER- 9 HE DICTION						
	ITEM	NUMBER' AND TYPE OF SHELLS	2 HE		2 SMOKE 9 HE						•
	мон	NUMBER AND TYPE OF ENEMY: WEAPONS	T MED	4 MED	2 MED			:	-		•
	GECRGE	TIME SHELLING ENDED	0642		9698						•
	FOX	TIME SHELLING BEGAN	7690		5695						
	EASY	LOCATION OF SHELLING		79859821	77268Eø8						
	DOG	METHOD AND ESTIMATED DISTANCE	SOUND LOCATING 79929845 (LOCATION)		1 FLASH- 8ANG 1850						•
	CHARLIE	METHOD AND ESTIMATED DIRECTION			PIN POINT FLASH 6300						
	BAKER	LOCATION OF REPORTING AGENCY	8\$97969\$ (CONTROL TEAM)		81269818					ŕ	•
	ABLE	SOURCE AND TIME	137 CF 592 4614	1PW TEAM OGIS	0.0						•
		SERIAL	4	9	7						,

Figure 7. Sample counterfire information form. (May be reproduced locally.)

delay, to all other agencies concerned. In addition to shelling reports and sound locating reports, all other counterfire information also is recorded as described above.

- d. When the regimental counterfire information officer receives information on the effect of counterfire missions he reports this to the regimental S-3. He reports all counterfire information concerning enemy strength, disposition, and tactics to the regimental S-2. He reports significant counterfire information and results to the regimental S-1 for entry in the unit journal. He keeps the artillery liaison officer informed of regimental counterfire information and operations.
- 38. TRAINING. a. As the regimental counterfire information officer, the counterfire platoon leader recommends to the regimental S-2 the scope and conduct of regimental training in counterfire information. The counterfire information officer makes a counterfire estimate of the situation at the beginning of each applicatory exercise, and he coordinates the counterfire information training of regimental units during these exercises. He assists the battalion commanders, the commander of the heavy mortar company, and commanders of other regimental units in counterfire information training. This training includes recognizing, evaluating, recording, and reporting counterfire information. The regimental counterfire information officer maintains close contact with each battalion counterfire noncommissioned officer. As counterfire platoon leader he trains his platoon.

For a guide, during basic unit training, see section II, appendix II.

- b. The scope of basic military training is common among all infantry units. Advanced individual training prepares each member of the counterfire platoon to perform his functions as a member of a team.
- c. During basic unit training, the counterfire platoon conducts squad and platoon training. During advanced unit training, arrangements are made for the counterfire platoon to train with the heavy mortar company and with the battalions until they are proficient in operating together (fig. 8); then, the platoon takes part in regimental training.
- d. During combined and joint training, counterfire information is coordinated with the artillery through the artillery liaison officer. Information is exchanged between the regimental counterfire information center and the artillery. The collection of counterfire information is planned so that information is simulated, collected, evaluated, reported, and disseminated until all agencies are familiar with their roles in counterfire information collecting and counterfire operations.
- e. Enemy weapons may be used or simulated so that counterfire squads and other agencies of counterfire information get realistic practice in collecting counterfire information. Targets may be represented by explosives, which the counterfire squads practice locating and reporting. They also train in close and immediate association with the mortars of the rifle companies, the heavy weapons companies, and the heavy mortar company.



Figure 8. During basic and advanced unit training, counterfire squads and counterfire weapons learn to work together.

Section II. TECHNIQUE

- 39. TECHNIQUE AND THEORY OF SOUND LOCATING **EQUIPMENT.** a. Sound locating is one means of getting accurate counterfire information. For a diagram of the sound locating equipment of one team, see figure 9. The sound locating equipment is accurate and is made for normal use in the field. However, carelessness and rough handling reduce its accuracy and shorten its operational life. Accuracy also is decreased by human error. Accurate results come from a knowledge of equipment capabilities, care and maintenance of equipment, selection of good operating locations, training, and practice. Much of the technique of surveying and sound locating requires a knowledge of measuring and plotting magnetic azimuths on a map or map substitute. For this reason, the men of the counterfire squads are trained in map reading and surveying before they learn sound locating technique.
- b. Sound locating is finding the location of a sound source. There are two methods—one method uses two sound locating teams while the other uses only one sound locating team. When only one team is used, it computes one azimuth by sound direction finding, and it computes distance by sound ranging. When two teams are used, each team computes an azimuth to the sound source by sound direction finding. Both azimuths are then plotted, and their intersection is the location of the sound source. Sound direction finding and sound ranging are described in c and d below.

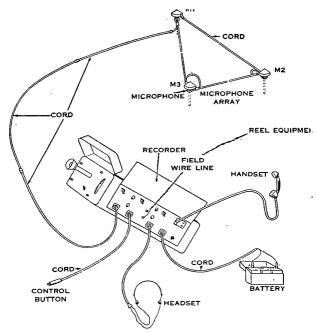


Figure 9. Schematic diagram of the sound locating equipment of one team.

c. Sound direction finding is computing the magnetic azimuth from a point to the source of a sound. Sound waves travel in all directions away from their source, like the waves caused by a stone dropped into a pond. This sound is received by all three microphones of the team, and transmitted to the recorder. It does not reach all three microphones at the same instant, so it usually is recorded as three sounds on a moving magnetic steel tape. The time differences between the sounds recorded on the tape are used by the computer to

determine the magnetic azimuth from the number 3 microphone to the sound source. Since sound direction finding from one team gives only the magnetic azimuth and not the distance to the sound source, to locate the sound it is also necessary to find either the magnetic azimuth from another location or the distance to the sound source by some other means (fig. 10).

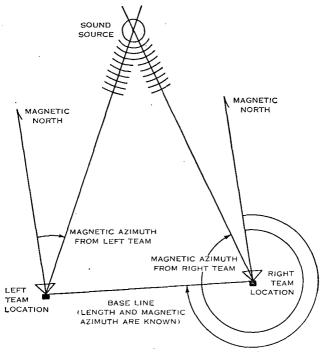


Figure 10. Sound direction finding from two or more teams.

d. Sound ranging is finding the distance from a point to the source of a sound. A sound is received

by a telephone located at the sound source, transmitted almost instantaneously by electricity to the recorder, and recorded on the recorder's moving tape. The same sound takes longer to travel by air to the team location, is received by the number 3 microphone and recorded on the moving tape. The time difference between the sound recorded by the telephone and the sound recorded by the number 3 microphone is used to compute the distance

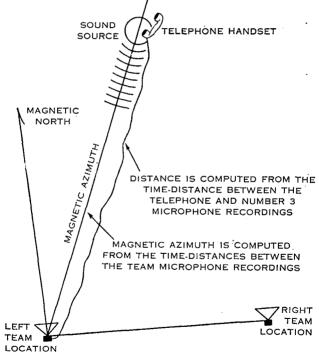


Figure 11. Sound direction finding and ranging from one team.

from the number 3 microphone to the sound source. This method is not used to measure the distance to an enemy weapon, an area under enemy control, or to any other location where a field telephone wire line cannot be laid. This method may be used to measure the length of the base line, the distance to a counterfire weapon position, or the distance to a reference point that is not under enemy control and can be reached by telephone wire line (fig. 11).

- 40. SELECTING SOUND LOCATING POSITIONS. a. The counterfire platoon leader normally selects the team locations for all three counterfire squads. When he cannot select their exact locations, he indicates the approximate locations to each squad leader on a map or map substitute. Each squad leader then reports the location of each team to the platoon leader after his squad has surveyed or estimated its position.
- b. The team positions are as near to the enemy as tactically possible. High, open, even ground is the best location for the microphones (fig. 12). Locations within dense woods or near high hills are avoided because vegetation and irregularities in the ground absorb or reflect sound waves, and cause echoes. Concealment and defilade nearby give the men of the team protection from enemy observation and fire.
- c. The base line is a surveyed or estimated line from the number 3 microphone of one team to the number 3 microphone of the other team. The magnetic azimuth of the base line is measured from



Figure 12. Good sound locating positions are on high, open, even ground with nearby concealment and defilade for the team and recorder.

the control team, or computed from the back azimuth from the other team.

d. Normal sound locating range to enemy close support weapons usually is not over about 2,000

yards. The best length for the base line is approximately one-third the distance to targets at normal sound locating range, or about 700 yards. A shorter base line causes significant errors when magnetic azimuths are used to plot the location of counterfire targets.

e. When both recorders are controlled by the operator at the control team a base line longer than 740 yards will have dead spaces near and beyond each end. These dead spaces are areas where enemy weapons cannot be sound located. They are caused by sound waves from the flanks being recorded and erased at the recorder nearer the sound source, before they arrive at the more distant recorder. Sound recordings remain on the moving tape only two seconds before they are erased to clear the tape for new sounds, unless the erasing head is made inoperative. Since sound travels by air at a speed of about 370 yards per second under average temperature and humidity conditions, at sea level, if the chief operator could stop the recorders the instant a sound passes over the microphone array of the more distant team from the sound source, the base line could be 740 yards long without dead spaces. A counterfire squad with a narrow sector of responsibility toward the front can have its base line longer than 740 yards, and the resulting dead spaces can be covered by the sectors of the other squads.

41. INSTALLING SOUND LOCATING EQUIPMENT. a. Each team installs a microphone array of three microphones connected by electrical cable to a

recorder. The team on the right, when facing toward the enemy, is the right team and usually is the control team. The other team is the left team. The control team normally has a field telephone wire line either to the regimental counterfire information center or to the nearest switchboard in the regimental wire system. When a counterfire squad is in immediate or close association with a counterfire weapon, the control team usually has a field telephone wire line to the counterfire weapon position or fire direction center. The other team installs a field wire line from its recorder to the recorder at the control team. This line permits both recorders to be stopped by remote control at the control team, and it permits the two teams to communicate with each other by telephone. The two teams also have radiotelephone communication with each other and with the regimental counterfire information center or counterfire weapon.

- b. Each member of each team has assigned tasks in installing the sound locating equipment. Most of the same activities are performed by corresponding men of both teams. The following list is a summary of the detailed functions of each member of the squad when installing sound locating equipment.
 - (1) The squad leader's duties include-
 - (a) Leading the squad to its position.
 - (b) Selecting the locations for both teams.
 - (c) Supervising the installation of equipment by both teams.

- (d) As chief operator, selecting the exact location for the right (control) team.
- (e) Carrying the recorder and one accessory chest for the right team.
- (f) Indicating the exact location of the number 3 microphone of his team to the computer.
- (g) Locating the number 1 microphone to the left front and the number 2 microphone to the right front of the number 3 microphone.
- (h) Tightening the cable connecting the

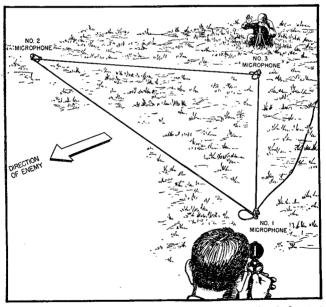


Figure 13. The operator measures the azimuth of the 3-1 line by compass or aiming circle.

- microphones, and staking the microphones into the ground.
- (i) Connecting the battery to the recorder, and turning on the power.
- (j) Measuring the magnetic azimuth of the line from microphone number 3 to microphone number 1, by compass or aiming circle, and telling the computer (fig. 13).
- (k) Connecting the cable from the microphones to the recorder.
- (1) Checking the microphones, the remote control operation, the sound power telephone, and the portable pack radiotelephone.
- (m) Contacting the operator at the left team when the equipment is installed.
- (2) The assistant squad leader's duties at the left team are similar to the squad leader's functions at the right team.
- (3) Each computer's duties include-
 - (a) Carrying one sound powered telephone, and one bag containing the microphones and cables of the team.
 - (b) Arranging the microphones to zero the counters on the recorder.
 - (c) Laying out the cable from microphone number 3.
 - (d) Laying out the microphone array on the ground in its approximate position.
 - (e) Staking the number 3 microphone in the ground at the spot indicated by the operator.

- (f) Assisting the operator to install micre phones number 1 and number 2, and to tighten the cable.
- (g) Recording the magnetic azimuth of the 3-1 line and the location of microphone number 3.
- (h) Placing covers on the microphones.
- (i) Setting the magnetic azimuth of the 3-1 line on the computer.
- (j) Helping the plotter dig a shelter for and emplace the recorder.
- (4) Each plotter's duties include-
 - (a) Carrying two battery boxes and one aiming circle and placing them near the recorder.
 - (b) Installing a wire line for communication to the counterfire information center or counterfire weapon. (The control team plotter lays a field telephone wire line either to the regimental counterfire information center, the nearest switchboard, or to a counterfire weapon. When a counterfire squad is in close or immediate association with a counterfire weapon, he paces and records the distance to the weapon position. The other team plotter installs a field wire line from his team to the recorder at the control team. He leaves enough slack to reach the number 3 microphone at his team. He paces the distance between teams

- so the length of the base line can be estimated.)
- (c) Digging a shelter for and emplacing the recorder.
- c. A standing operating procedure for installing the sound locating equipment is developed during advanced individual training. For a sample SOP, see appendix III.

42. ORIENTING THE COUNTERFIRE SQUAD POSITION.

- a. Each counterfire squad orients its position as soon as its sound locating equipment is installed. This includes finding the location, length, and direction of the base line. There are two methods of orienting the counterfire squad position. The most rapid method is by inspecting a map or map substitute and estimating the team locations on the ground. The most accurate method is by surveying the number 3 microphone locations on the ground.
- b. Inspection and estimation is used only when it is impossible for the counterfire squad to make a survey. In this method, the counterfire squad plots the approximate location of each team and the base line on a map or map substitute. It measures the length of the plotted base line by using the scale of the map or map substitute. It measures the magnetic azimuth of the plotted base line with a protractor. A counterfire squad that is oriented by inspection and estimation only cannot furnish accurate target data for counterfire weapons. It can assist counterfire weapons in the rapid method of fire adjustment.

c. Surveying is used as soon as the situation permits a counterfire squad to make a survey. A counterfire squad that is oriented by surveying can furnish accurate target data for any counterfire weapons whose locations also are surveyed. The counterfire squads are equipped to survey by visual methods and by sound locating methods. To survey by visual methods each team locates its position by resection (fig. 14). When making a sound survey they use either sound direction finding and resection or sound direction finding and sound ranging. Survey also is possible by a combination of visual direction finding and sound

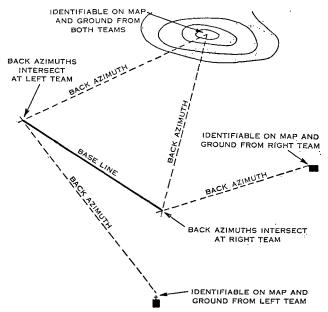


Figure 14. Resection method of surveying the base line.

locating methods. Counterfire squads are not equipped to make a survey by running a traverse, because they do not have conventional equipment for measuring distance on the ground.

- d. Each counterfire squad normally surveys its own position and reports the exact location of the control team to the counterfire information center. It normally is not responsible for surveying counterfire weapon positions. However, when the counterfire squads are in *close association* with counterfire weapons, each squad may survey one or more counterfire weapon positions. A counterfire squad may survey a counterfire weapon position either by sound direction finding from two teams, or by sound direction finding and sound ranging from one team. When a counterfire squad is in *immediate association* with a counterfire weapon it is not necessary to survey.
- 43. SURVEYING THE BASE LINE BY SOUND LOCATING. a. General. When a counterfire squad cannot survey the base line completely by visual resection, it surveys by sound locating or by a combination of visual direction finding and sound ranging. First the squad finds the length and magnetic azimuth of the base line, and it then determines the distance and magnetic azimuth to a reference point.
 - (1) Length and magnetic azimuth of the base line. The remote control wire line is disconnected from the recorder and connected to a telephone handset at the number three microphone of one team.

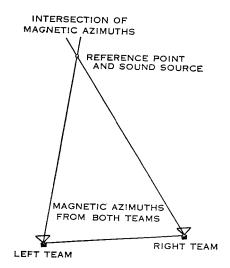
A weapon is fired close to the telephone handset, and the sound of the shot is transmitted by wire to the recorder at the surveying team. The same sound after traveling through the air is received again a moment later by the microphones at the surveying team. The time differences between the recorded sounds are measured on the recorder and used to compute the length and azimuth of the base line (par. 39c). The telephone handset is disconnected, and the remote control wire line is reattached to the recorder. When one team has measured the length and magnetic azimuth of the base line, the other team may check the results in a similar manner

(2) Location of the base line. After the length and magnetic azimuth of the base line are measured, the squad finds the location of one team with respect to a reference point on the ground. If the reference point is not visible from either team, the distance and magnetic azimuth to the reference point are measured by sound locating. If both teams participate in this part of the survey, each team finds the magnetic azimuth to the sound of a shot originating at the reference point. If only one team participates in this part of the survey, it uses sound direction finding and sound ranging to find the magnetic azimuth and the distance to the sound of a shot originating at the reference point. Both teams may have to be used to measure the magnetic azimuth to a distant reference point (sound direction finding) when a telephone wire line cannot be laid to it. When a reference point is near one team, only the nearest team measures the magnetic azimuth and the distance to the reference point (sound direction finding and sound ranging) (fig. 15).

b. Duties of squad members.

- (1) The squad leader supervises sound locating by both teams in his squad and conducts the sound locating at the control team. During the survey of the base line he sets the control on the recorder at the control team; gives the command for the other team to fire a weapon; stops the recorder; checks the recording; sets the recorder controls for manual operation: makes measurements on the recorder: and decides when the survev is completed at the control team. He tells the assistant squad leader when to commence the survey at the other team. The squad leader reports the exact location of the control team to the platoon leader.
- (2) The assistant squad leader conducts the survey at the other team location. His functions at his team are similar to the

A DISTANT REFERENCE POINT



A NEARBY REFERENCE POINT TELEPHONE HANDSET

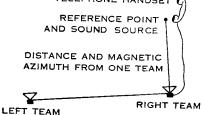


Figure 15. Surveying by sound locating an unobserved reference point.

- functions of the squad leader at the control team.
- (3) Each computer uses either the soundpowered telephone or the radiotelephone
 to tell the plotter at the other team when
 to fire. He records the survey measurements on the survey data sheet (fig. 16).
 He computes and records the distance
 and magnetic azimuth to the other team.
 The computer at the control team receives data from the other team, and
 tells the squad leader (chief operator)
 the results of the survey. He averages
 the results of the survey, records the base
 line data on the data sheet, and gives it
 to the plotter.
- (4) Each plotter furnishes security for his own team position. He observes the microphones and cables, and prevents any interference with the survey. He fires shots for the other team. He disconnects the field wire line from the recorder and attaches the sound-powered telephone handset to the end of this line. He goes to number three microphone with his individual weapon and with the handset attached to the end of the line. He reports to the computer when he is ready, and he fires a weapon on the order of the computer at the other team. When the other team has completed its survey of the base line, the plotter reattaches his end of the field wire line to

SURVEY DATA SHEET NO....

E NO	26/A JOV 49	WIND SPEED				
SURVET DAM SHEEL NO.	LOCATION F.T. BENYLING, GEORGIA	WEATHEROVER CAST				

SELF SURVEY OF BASE LINE

L	REMARKS	NO AZIMUTH CORRECTION		"		
	USIANCE (TANUS)	640	640	640		40
3	SPEED NO DISTANCE (YARDS)		94	Ø#		AVERAGE 640
ТН	CORRECTED					:35
AZIMUTH	COMPUTED	994 912 1535	1550	Ø94 910 152¢		AZIMUTH 4535.
HANDWHEEL READINGS COUNTER READINGS	NO 2	912	996 914	Ø76		
COUNTER	NO 1	760	26,0	460		
READWGS	DIFF	97	97	7/6		
WHEEL	TP AIR	7	28	3 9		
HANE	4₽	7	N	3		
TEAM	TEAM (L OR R)		R	B		
SHOT NO	SHOT NO		2	33	4	

SURVEY OF COUNTERFIRE WEAPONS POSITIONS

] ;
					Sot Arthur J. Keith. (sound Leaden)
450	440	451		447	7.7 7.7 7.00
45	40	74		AVERAGE 447	AAA R. J. KEI CO. HAR
				øøe	RIGHT TEAM AZIMUTH OF 3-1 UNE. R.
806	926	880		AVERAGE 900	RIGHT TEAM UTH OF 3-1 LINE. OPERATOR. Ser. UTER. PFC.
DE 1 1 1 DE 1023 888 990	11 428 874	2 11 628 876			
\$23	850	Ø22			47.Z
10	11	77			WILSO
7	2 3	7		,	40.0 √ 8. 3 / .
7	2	1			LEFT TEAM 22.900.000.000.000.000.000.000.000.000.0
R	R	R			2.4.4.
-	2	3	4		AZIMUTH OF 3-1 LINE OPERATOR C. COMPUTER P.C.C.

Figure 16. Sample survey data sheet. (May be reproduced locally.)

- the recorder of his team. When his team completes its survey, he plots the length and orientation of the base line on grid paper.
- (5) A standing operating procedure for the self-survey of the base line (survey made with the use of sound-locating equipment) is developed during advanced individual training. For a sample standing operating procedure, see appendix III.
- 44. SURVEYING A COUNTERFIRE WEAPON BY SOUND LOCATING. a. When it is necessary for a counterfire squad to survey a counterfire weapon position or its base survey point location, the survey may be made by sound locating. Sound locating is used only when the survey cannot be made by visual resection. A counterfire squad locates a counterfire weapon position or base survey point by either sound direction finding from both teams, or sound direction finding and sound ranging from one team. When a survey is made from only one team, it usually is made by the team nearer to the counterfire weapon.
- b. A standing operating procedure for surveying a counterfire weapon is developed during advanced individual training. Duties of personnel are similar to those outlined in paragraph 43. For a sample SOP, see appendix III.
- 45. SOUND LOCATING A COUNTERFIRE TARGET. a. After each counterfire squad installs its equipment and surveys or estimates its location each team keeps the power turned on and its equipment

in operation continuously. Every sound that reaches either team location is received by all three microphones, and recorded on the moving magnetic steel tape in the recorder. If the recorder is not stopped within two seconds after a sound is recorded, that sound is erased automatically to clear the tape for new sounds. When the squad leader (chief operator) at the control team hears what he believes to be an enemy weapon, he uses the remote control switch to stop the recorders of both teams. He reads the time differences between the sounds recorded at his team and tells the computer. The assistant squad leader (operator) reads the time differences between the sounds recorded at his team, and tells the computer. Each computer determines the magnetic azimuth from his team location to the sound source. The computer at the control team gets the magnetic azimuth at the other team by telephone or radiotelephone from the other computer, and records this data on the data sheet (fig. 17). He gives the data sheet to the plotter at the control team. The plotter plots the location of the enemy weapon, and tells the squad leader the result of the plot. The squad leader or the computer reports the location of the enemy weapon to the counterfire information center. This report includes the estimated number and type of weapons and the exact location of the enemy weapon position. When a counterfire squad is operating with a battalion, the counterfire squad leader or the computer reports the location of each enemy weapon to the battalion command post. When the counterfire squads are in close or immediate asSOUND LOCATING SET DATA SHEET NO ____

AZIMUTH OF BASE LINE ... 4535 LOCATION ... F.T. BENNING, GEORGIA LENGTH OF BASE LINES ... 630 K.Q.S. WEATHER ... QV, E.R. C. A.S.T.

DATA ON ENEMY TARGETS

REMARKS		Ø.	Ø	B			
COMPUTER'S DATA OPT () CFW-T()	AZIMUTH (MILS)	3340	ØØ 78	3246			
COMPUTE OPT ()	NO I NO 2 AZIMUTH NO I NO 2 AZIMUTH RANGE (YARDS)	850	5801	Ø677	•		
RIGHT TEAM DATA 3-1 AZIMUTH MILS	AZIMUTH	2800	266Ø	2880			
RIGHT TEAM DATA 3-1 AZIMUTH MILS	2 ON	000	949	Ø5Ø			
RIG 3-	1 ON	$\emptyset II$	ØII	\$80			
M DATA H MILS	AZIMUTH	38,00	3440	3535			
LEFT TEAM DATA 3-1 AZIMUTH MILS	NO 2	007	140	150			
3-1 3-1	- ON	OPP	040	240			
TYPE OF GUN		4844 L MORT GOO 164 38 50 110 560 2850 854	4996 HV MORT 446 146 3446 110 640 2666 1035	1000 HOW GAG 150 3535 080 050 2880 1190			
TIME OF	TIME OF DAY		9060	1000			
TARGET NO DAY		7	7	8			

COMPUTER. PFG. FRANK T. MATZ. COMPUTER PFG. ELLYNOOD HART. SGT ARTHUR KEYTH PLOTTER. PEC FOWARD PURCELL ROTTER. PEC HUGH C. BERTRAND OPERATOR ... C.P.L. WOODROW WILSON ... CHIEF OPERATOR .. SGT. ARTHUR KEITH..... LEFT TEAM LEFT TEAM

Figure 17. Sample sound locating data sheet. (May be reproduced locally.)

sociation with counterfire weapons, the squad leader or the computer reports the location of the enemy weapon to the appropriate counterfire weapon crew or fire direction center.

- **b.** A standing operating procedure for sound locating a target is developed during advanced individual training. For a sample SOP, see appendix III.
- 46. THE RAPID METHOD OF FIRE ADJUSTMENT. a. A counterfire squad uses the rapid method of fire adjustment when the situation prevents counterfire weapons from having or using accurate target data on unobserved counterfire targets. This technique also may be used in engaging unobserved counterfire targets before surveys can be made. In this method the counterfire squad is oriented by inspection and estimation. It sound locates an enemy weapon firing and a counterfire weapon shell burst, and senses the difference between these two sound source locations.
- b. As soon as the sound locating equipment is installed, the counterfire squad estimates the location of each team by inspecting a map or map substitute, and then plots the base line. It estimates the counterfire weapon position by sound locating on a shot fired from the weapon position or base survey point, or by inspecting the map or map substitute. The counterfire squad tells the counterfire weapon crew or fire direction center the control team location with respect to the counterfire weapon or base survey point. They then are ready to adjust the fire of the counterfire weapon on unobserved counterfire targets.

c. When the counterfire squad leader hears an enemy weapon firing, the counterfire squad sound locates the apparent weapon position. It reports to the counterfire weapon crew or fire direction center the range and magnetic azimuth from the control team to the apparent target location. The counterfire weapon crew or fire direction center computes the firing data to the apparent enemy weapon location, using normal observed fire procedure. When the counterfire weapon crew is not equipped to compute this data the counterfire squad plots the counterfire weapon firing data, and tells the counterfire weapon crew. Figure 18 illustrates this technique when the counterfire squad plots the firing data from the counterfire weapon position to the apparent target location. For normal observed fire procedure, see FM 23-92.

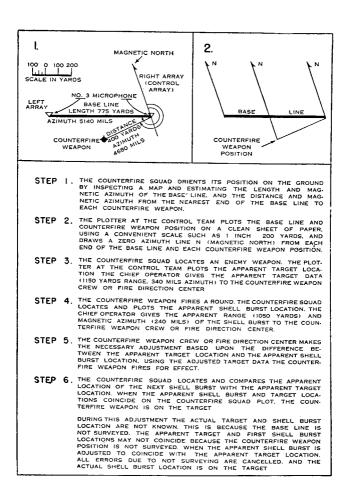


Figure 18A. Rapid method of fire adjustment.

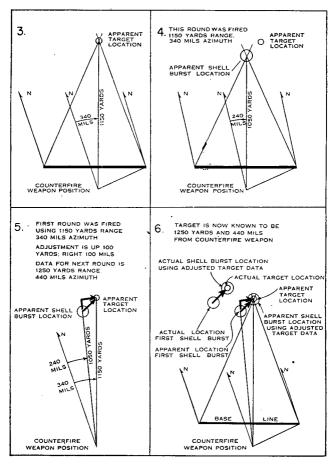


Figure 18B. Rapid method of fire adjustment.

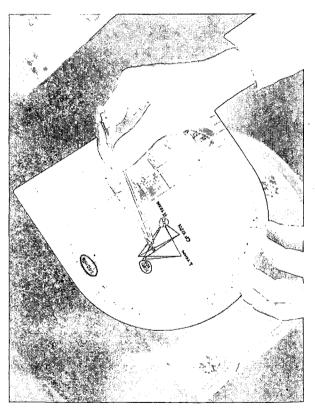


Figure 18C. This process is also done on the M-10 plotting board.

d. Surprise fire, for effect, also can be delivered when using the rapid method of fire adjustment. This is done by first adjusting the counterfire weapon onto an auxiliary target and then shifting to the apparent target location (fig. 19).

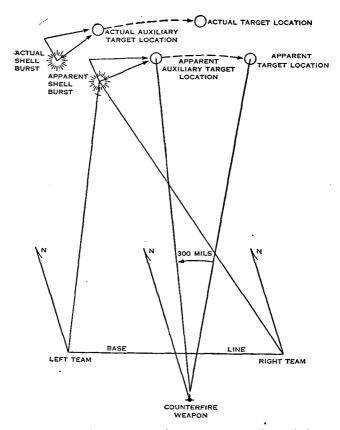


Figure 19. Surprise fire by the rapid method of fire adjustment.

- 47. CLOSE AND IMMEDIATE ASSOCIATION WITH COUNTERFIRE WEAPONS. a. When the communication necessary for normal counterfire operations through the regimental counterfire information center or through a battalion does not exist, a counterfire squad may be used in either close association, or in immediate association with selected counterfire weapons. In both of these methods, the counterfire squads report counterfire information to counterfire weapons without communicating with the regimental counterfire information center or with a battalion. In both methods each counterfire squad normally operates with only one counterfire weapon or battery at a time.
- **b.** Close association with a counterfire weapon is used when centralized control is not practicable. Because centralized operations through the regimental counterfire information center are more flexible and give better coverage of the regimental area of responsibility, close association with counterfire weapons is terminated as soon as the normal method is possible. When the counterfire weapon and the counterfire squad are in close association, each counterfire squad position is selected and occupied in the same manner as in normal operations. When the sound locating equipment is installed, each squad lays a field telephone wire line to the counterfire weapon position or fire direction center instead of to the regimental counterfire information center (figs. 20 and 21). To save time, each squad may use existing wire circuits through a nearby switch-

board, or establish radio communication with the counterfire weapon. As soon as possible after installing the equipment, the counterfire squad surveys the base line and reports the exact location of the control team into the counterfire weapon crew or fire direction center. When the counterfire squad and counterfire weapon are using an accurate map or map substitute with a scale of 1:25,000 or larger, the counterfire squad reports counterfire information by any convenient coordinates. When an accurate map or map substitute is not available, the counterfire squad reports counterfire information by polar coordinatesnormally, with respect to its own position. However, it may report the polar coordinates with respect to the counterfire weapon, base weapon, or base survey point location when the counterfire weapon is not using normal observed fire procedure. If the counterfire squad and the counterfire weapon are not surveyed, they use the rapid method of fire adjustment.

In close association, the exact location of each counterfire target is not substantiated and verified by other counterfire information collecting agencies through the regimental counterfire information center. Therefore, this method usually requires that area fire, such as a mortar section or platoon concentration, be used against each counterfire target. The 4.2-inch mortar of the heavy mortar company is the most effective infantry weapon in close association with a counterfire squad.

c. Immediate association with a counterfire



Figure 20. A counterfire squad in close association with a counterfire weapon.

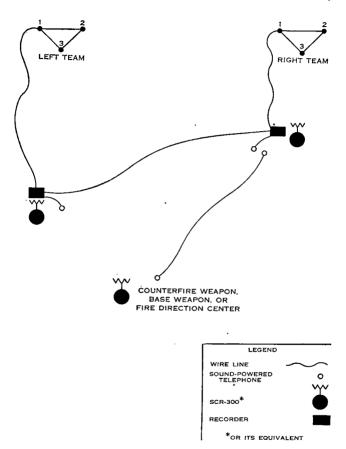


Figure 21. Schematic communication diagram for close association.

weapon is a method of using a counterfire squad and a counterfire weapon as a team to engage counterfire targets with the least possible delay. It is used only when the need for speed is more important than good counterfire weapon or counterfire squad positions. In this method, the counterfire weapon position is in the immediate vicinity of the control team location. For precision fire, the counterfire weapon or base weapon is not more than 15 yards from the number 3 microphone of the control team. For area fire, this distance may be slightly greater. In this method, the only means of communication between the counterfire squad and the counterfire weapon are by voice and by hand and arm signals. This method has the disadvantage of limiting counterfire weapon positions to areas where the terrain is suitable for sound locating. Such terrain seldom is favorable for indirect fire weapons, such as the heavy mortar. Therefore, during immediate association with the heavy mortars, sound locating squad and mortar platoon leaders coordinate their selection of positions to obtain the best possible protection for the mortars, while providing adequate sound locating positions for the counterfire squads. This usually requires that both the mortars and the sound locating squads move frequently to protect the mortars. When a rapidly moving situation slows down enough for a counterfire squad to establish communication and make surveys, immediate association is terminated. Thereafter, the squad either operates through the regimental counterfire information center, is attached to a battalion, or operates in close association. In immediate association, the counterfire squad surveys the base line, when practicable, but does not survey the counterfire weapon position. The counterfire weapon or base weapon position and its base aiming stake are on a line with the 3-1 line of the control team (fig. 22). The counterfire squad computes the distance to the target from the number 3 microphone of the control team. It computes the angle to the target with respect to the 3-1 line of the control team rather than the magnetic azimuth to the target. The squad leader gives the target distance and the target angle to the counterfire weapon crew or fire direction center as range and deflection from the base aiming stake. When the counterfire weapon or base weapon is 25 vards or more from the number 3 microphone of the control team, an experienced weapon crew or fire direction center may modify this data slightly to obtain firing data which will cover the target. When time is not available to survey the base line, the rapid method of fire adjustment is used.

48. SOUND LOCATING WITH THREE TEAMS. a. A third sound locating team sometimes is attached to a counterfire squad for more dependable sound locating data. In this way, two of the counterfire squads may become counterfire sections of three teams each. The counterfire platoon leader designates the squad that is to be split, and attaches one team of this squad to each of the other two squads. The squad leader of the split squad temporarily becomes a team operator, and the other two squad leaders become section leaders.

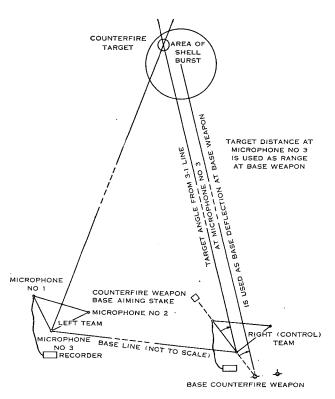


Figure 22. Immediate method of association.

b. During installation of three teams the middle team is used as the control team, and the recorder of the control team is connected to the recorders of both of the other teams. When sound locating a counterfire target, the control team plots three instead of two magnetic azimuths to the counterfire target. If all three magnetic azimuths intersect at the same point, this point is the location of the target (fig. 23). If each pair of

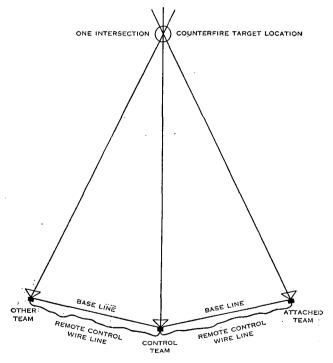


Figure 23. The three-team sound locating section (plotting one intersection).

magnetic azimuths intersects at different points, the target is in the triangle formed by the three intersections (fig. 24).

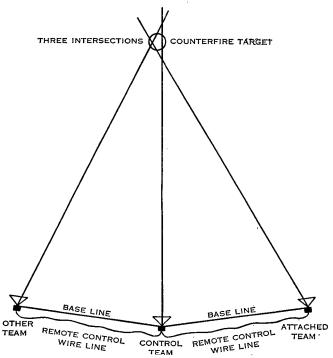


Figure 24. The three-team sound locating section (plotting three intersections).

c. This arrangement may be used from time to time without destroying the integrity of the counterfire squads, when the three squads are approximately abreast and not more than a few hundred yards apart. When this arrangement is anticipated, a field wire line is laid from each flank squad to the nearest team of the middle squad. During normal operations these extra remote control lines are not connected. During sound locating with three teams each team of the middle squad disconnects its own squad remote control wire line, and plugs the remote control wire line from the appropriate flank squad into its recorder. The three squads become two sections. Each team reports its data to the control team of the section in which it is operating (fig. 25).

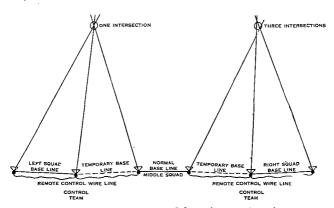


Figure 25. Three squads sound locating as two temporary three-team sections.

Section III. TACTICAL EMPLOYMENT

49. GENERAL. a. The mission of the counterfire platoon is to locate enemy close support weapons and report this information promptly so it can be used by counterfire weapons. The type of tactical operation determines the way the counterfire

squads are used. Squads seldom are attached to other units. The counterfire platoon leader keeps the squads informed of the tactical situation to help them distinguish between enemy and friendly weapons.

- b. In operations such as an approach march, a pursuit, early phases of a withdrawal, a delaying action, or a retirement, and early in an airborne operation, the counterfire squads may not be able to maintain communication with the regimental counterfire information center or to survey their positions. When centralized control is not practicable, the counterfire squads may be attached to battalions or to counterfire weapon units for use in close or immediate associaiton with selected counterfire weapons.
- c. The regimental counterfire information officer makes a counterfire information plan. Sources of counterfire information include maps, aerial photographs, shelling reports, sound locating reports, captured documents, the interrogation of prisoners of war, and reconnaissance observer reports. He anticipates friendly counterfire weapons will reach positions that are in range of enemy close support weapons. He plans to have the counterfire squads reach their positions in time to survey, sound locate, and report timely counterfire information. He notifies the regimental S-3 as he receives dependable counterfire information. In his counterfire information plan he may divide the regimental area into two or three sub-areas for counterfire information. Each sub-area is made

the sector of responsibility of a counterfire squad or a three-team counterfire section. These subareas are based upon sound locating capabilities, and need not necessarily correspond to battalion areas or zones.

- d. While regimental plans and orders are being prepared for each operation, the counterfire information officer makes preparations to collect and evaluate counterfire information at the regimental counterfire information center. He makes a counterfire chart of the area of operations. He plots the location of each source of counterfire information and each counterfire weapon as soon as he knows them. He decides how and where to use the counterfire squads. He tells them the situation and the regimental plan of operations. He coordinates regimental counterfire information plans with the battalion counterfire noncommissioned officers.
- 50. MOVEMENT TO CONTACT. During route column the counterfire platoon moves with the regimental headquarters company. During tactical column the counterfire platoon may move with the headquarters company if the regiment moves on one route. Counterfire squads may be attached to battalions in order to begin sound locating operations more promptly. During the approach march a counterfire squad may accompany each leading battalion or a selected counterfire weapon for the same reason. Counterfire squads may be used in close or immediate association with counterfire weapons which are moving too fast to establish

communication with the regimental counterfire center.

- 51. ATTACK. a. During the preparation for a coordinated attack and during the attack itself sound locating operations attempt to locate all enemy weapons which can interfere with the regimental mission. These operations begin as early as possible and are intensified to find all enemy weapons which might interfere with the success of our attack. Enemy weapons observed or sound located are reported, recorded by the counterfire information officer, verified by the counterfire squads, and destroyed or neutralized by counterfire weapons. To obtain surprise, counterfire information which is collected, examined, and distributed to counterfire weapons sometimes is not used to fire counterfire missions until just before the attack.
- b. The counterfire information officer plans, in advance, how he will use the sources of counterfire information. During the period of intensive collection of counterfire information before the attack, the counterfire squads operate through the regimental counterfire information center. After the attack is launched the counterfire squads may operate in close association with selected counterfire weapons. Counterfire squad positions are surveyed before the attack. After the first displacement, their positions are estimated initially, and surveyed as soon as the tactical situation permits. The rapid method of fire adjustment is used before the counterfire squads are able to survey their positions.

- 52. REORGANIZATION. The counterfire platoon reorganizes, whenever necessary, such as when the regiment reaches an objective or is stopped. Preparations are made to continue the attack or to defend. The counterfire platoon leader determines the needs of his platoon, assists squad leaders to replace necessary equipment and personnel, and continues to plan how to collect counterfire information. The counterfire squads reestablish communication with the regimental counterfire information center, if it has been interrupted, and complete their surveys. They continue to collect counterfire information and report it to the counterfire information center.
- 53. PURSUIT. The counterfire information plan changes rapidly during a pursuit. The use of counterfire squads may be reduced by the lack of time to install and survey, and because decreased enemy resistance may result in fewer counterfire targets. The counterfire squads may not be able to maintain communication with the regimental counterfire information center, but may be used in either close or immediate association with counterfire weapons. They may not be able to survey each position they occupy. Frequent use is made of the rapid method of fire adjustment. If the pursuit is slowed by enemy delaying action, the counterfire squads survey and establish communication with the regimental counterfire information center as soon as possible.
- **54. DEFENSE. a.** Counterfire information collecting operations are deliberate in a sustained defense.

The counterfire estimate of the situation considers all available counterfire weapons and information sources. Other regimental staff officers give any counterfire information they receive to the counterfire information center promptly. The regimental counterfire information officer cooperates closely with the artillery liaison officer in exchanging counterfire information with the artillery.

b. In defense, the counterfire squads are deployed across the regimental sector well forward in the front line battalion defense areas. Each squad surveys its position, establishes communication with the regimental counterfire information center, and normally operates under centralized control. Infantry counterfire weapons also survey their positions so they can fire counterfire missions from map data. Tanks of the regimental tank company are prepared to engage enemy direct fire weapons at long ranges when surprise will not be lost by doing so. When the counterfire platoon leader anticipates that a squad will operate in close association with a counterfire weapon located near the counterfire squad; the squad may survey nearby counterfire weapon positions in advance. Direct support artillery may request counterfire information direct from the counterfire squads through an artillery forward observer. This may be desirable when a forward observer cannot observe an enemy weapon and is located near a counterfire squad position. In such a situation, the regimental counterfire information officer may have a counterfire squad sound

survey an artillery battery that is within sound locating range.

- **55.** WITHDRAWALS. α. When the regiment executes a withdrawal, the counterfire platoon normally accompanies the main body. However, one or more counterfire squads may stay on the old position as long as friendly counterfire weapons can be used.
- b. A counterfire information plan is made before the withdrawal begins. When each counterfire squad arrives at the new position its location is surveyed in readiness for the approach of enemy weapons. Since sound locating methods do not depend on visual observation, the counterfire squads are used alike in both night withdrawal and daylight withdrawal. New positions to be occupied by the counterfire squads during a night withdrawal are surveyed during daylight, when possible.
- 56. DELAYING ACTION. When delaying action is accomplished by defense on one position the counterfire platoon operates in the same manner as in a sustained defense. Counterfire weapons engage enemy weapons at greater ranges than during a sustained defense. When time permits, the counterfire squads establish communication with the counterfire information center and survey their positions. If the delaying position is to be held for only a short time, close association with counterfire weapons and the rapid method of fire adjustment may be used. In a delaying action on

successive positions the counterfire platoon is used in the same way as in a withdrawal. The use of the counterfire platoon in offensive delaying action is similar to its employment in any other attack. Whenever possible, the counterfire squads survey, and establish communication with the regimental counterfire information center.

- 57. RETIREMENT. During the initial phase of a retirement, the counterfire platoon operates in the same way as in a withdrawal. After contact with the enemy has been broken, the counterfire platoon operates as in any tactical movement (par. 50).
- 58. RELIEF IN CONTACT. The counterfire information officer of the relieving regiment visits the counterfire information center of the unit to be relieved, and makes a reconnaissance of the counterfire squad locations. His actions before and during the relief include—
- a. Arranging to take over the counterfire chart and overlays.
- **b.** Making an estimate of the situation and a counterfire information plan.
- c. Knowing the communication system used by the counterfire squads, the counterfire information center, and the counterfire weapons being relieved.
- d. Informing the regimental S-2 of the results of his reconnaissance and his conference with the counterfire information officer of the regiment being relieved.

- e. Reporting to the headquarters company commander, and making recommendations for the relief.
- **f**. Informing all counterfire information sources of their part in collecting counterfire information.
- g. Issuing instructions to the counterfire squad leaders.
- h. Arranging for each squad leader to reconnoiter the route to his squad position.
- i. Leading the platoon to the squad release point, or arranging for each squad to accompany the battalion in whose area it is to be located.
- j. Receiving reports from each squad leader, and reporting to the S-2 and the headquarters company commander when the relief is completed.
- **k.** Notifying the counterfire information officer of the unit being relieved when his counterfire squads are ready to function, and when he is ready to take over the counterfire information center.
- 59. AIRBORNE OPERATIONS. When information of enemy weapon locations can be obtained during the reconnaissance phase, counterfire information collection begins before arrival in the landing area. Counterfire squads usually land with the regimental reserve. After landing, counterfire information collecting is resumed as soon as possible. If the enemy reaction forces the regiment to defend, pending an airborne buildup in the landing area, counterfire operations are intensified. In addition to weapons used against ground troops, counterfire squads locate and report enemy antiaircraft weapons which can interfere with later parachute and air-landing echelons.

- **60. ANTIAIRBORNE DEFENSE.** The counterfire platoon takes part in antiairborne defense. During the planning phase the platoon leader studies all probable landing areas and drop zones. He makes a counterfire information plan, which considers all information sources for sustained defense, delaying action, and counteroffensive.
- 61. SPECIAL OPERATIONS-ATTACK OF A FORTIFIED LOCALITY. In the attack of a fortified locality counterfire information is divided into two phases -information collected before the attack and information collected during the attack. The counterfire information plan is elaborate, thorough, and flexible. Counterfire information includes the location of all enemy weapons within the zone of advance. Collection of this information starts before the attack. It covers as much of the fortified locality as the range of counterfire information sources permits. Aerial reconnaissance augments ground information. When the attack starts, counterfire weapons are massed against all known enemy weapons. As troops move forward, fire is lifted from each successive target and advanced deeper into the fortified locality. Counterfire squads report counterfire information to the regimental counterfire information center. They also may assist counterfire weapons by the rapid method of fire adjustment. To keep up with the attack, and maintain continuous operation while covering the regimental zone, they may displace forward by echelon.
- 62. SPECIAL OPERATIONS—OPERATIONS AT RIVER LINES. Operations at river lines require the coun-

terfire squads to be used well forward. They normally operate as close as possible to the near bank. In an attack of a river line, counterfire squads are installed early along the near bank. Enemy weapons which may interfere with the crossing are located. Because troops are vulnerable to the grazing and flanking fires of enemy machine guns and direct fire weapons, while crossing, more attention is given to locating these weapons than in other operations. After a bridgehead is established, counterfire squads locate more distant enemy weapons whose fire threatens the bridgehead. Sound-locating operations in the defense of a river line are similar to any other defense. The counterfire squads may be located on or forward of the far bank until friendly security echelons are driven in.

63. SPECIAL OPERATIONS — NIGHT OPERATIONS.

Night combat increases the difficulty of surveying counterfire squads and counterfire weapons. Survey at night usually is done by sound locating. When the positions of the counterfire squads and the counterfire weapons are surveyed, sound-locating operations are as effective at night as in daylight.

64. SPECIAL OPERATIONS—OPERATIONS IN BUILT-UP AREAS. Combat in towns may limit the effectiveness of sound-locating equipment. Sound waves are deflected by buildings. The counterfire squads are located well forward and use visual observation, when possible. Flat topped buildings

may provide good positions for sound-locating equipment.

65. SPECIAL OPERATIONS—OPERATIONS IN WOODS.

Combat in woods limits the use of sound-locating methods, similarly to combat in towns. In addition, visual methods of obtaining counterfire information are limited by poor observation. Reconnaissance patrols provide counterfire information. Combat patrols may be used against enemy weapons which cannot be located accurately enough for counterfire weapons to destroy or neutralize them. In situations where sound-locating equipment is not effective in woods, sound-locating squads may be assigned other missions such as locating enemy weapons by observation.

66. SPECIAL OPERATIONS-MOUNTAIN OPERATIONS.

The extensive use of enemy indirect fire weapons in mountains requires the extensive use of friendly counterfire information sources. Counterfire squad positions in mountains usually are located at or near the topographical crests.

67. SPECIAL OPERATIONS — OPERATIONS IN SNOW AND EXTREME COLD. Combat in snow and extreme cold is characterized by the adverse effect of temperature and weather upon sound-locating equipment. However, sound travels farther in dry, cold air except during storms and high wind. Sound-locating equipment may not function in subzero temperatures unless special precautions are taken in its care and maintenance.

- 68. SPECIAL OPERATIONS—OPERATIONS IN DEFILES. Combat in defiles is similar to any other operation on a narrow front.
- 69. SPECIAL OPERATIONS JUNGLE OPERATIONS. Jungle operations are similar to operations in woods. Observation and sound locating are limited by dense vegetation. Mobility of equipment also is limited in jungles. When located near the enemy, the counterfire squads are vulnerable to enemy patrols. Therefore, use is made of the proximity of other units to insure security of the counterfire squads. Special precautions are taken to protect sound-locating equipment from fungus and other damage due to heat and dampness.
- 70. SPECIAL OPERATIONS DESERT OPERATIONS. Desert operations usually have the best natural conditions for sound locating. Other sources of counterfire information also are benefitted by long-range observation. The counterfire squads are installed near the top of hills or dunes, away from obstructions. The lack of moisture is good for equipment. Precautions are taken to protect equipment from the abrasive action of dust and sand.
- 71. SPECIAL OPERATIONS AMPHIBIOUS OPERATIONS. a. In amphibious operations the counterfire squads are used in the same manner as in any other offensive operation. During the planning phase, the counterfire information officer collects information of enemy weapons in the objective area. This is secured from aerial reconnaissance, photo reconnaissance, naval reconnaissance, coast

watcher reports, and advance ground patroling in the objective area. Special measures are taken before embarkation to protect equipment from moisture and salt water during the voyage and landing. Counterfire information is processed through naval gunfire liaison parties and tactical air concontrol parties until ground communication and counterfire information agencies are established ashore.

b. Embarkation usually is organized to permit the counterfire squads to land with elements of the regimental heavy mortar company. After debarkation the counterfire squads operate in immediate or close association with the heavy mortar platoons until the establishment of communication with battalion and regimental headquarters permits sound-locating operations to be centralized under regimental control.

CHAPTER 3

COMMUNICATION PLATOON

Section I. GENERAL

72. RESPONSIBILITY FOR COMMUNICATION. a. The regimental commander is responsible for the installation, operation, and maintenance of the regimental communication system and for its efficient functioning as a part of the division system. Each commander exercises technical and tactical supervision over the communication systems of all units of his command. Technical supervision standardizes the technical installation, operation, and maintenance of the system. Tactical supervision insures that the communication system is established and maintained to meet operational requirements. The communication system for any operation is based upon the tactical plan and current orders pertaining to communication. When the available means of communication are used correctly, the communication system permits efficient exercise of command. It is used for controlling units and fire power, transmitting orders and information, coordinating action, regulating supplies, and maintaining contact with higher, adjacent, and supporting units. The failure of a means of communication does not relieve a commander of his communication responsibilities.

- **b.** The establishment and maintenance of communication between units is governed by the following general rules:
 - (1) The higher unit is responsible for establishing and maintaining communication with the lower (including attached) unit.
 - (2) A unit supporting another unit by fire is responsible for establishing and maintaining communication with the supported unit. A unit supporting another unit other than by fire contacts the supported unit and coordinates communication.
 - (3) Lateral communication between adjacent units is established and maintained as directed by the next higher common commander. In the absence of specific instructions, the unit commander on the left is responsible for establishing and maintaining communication with the unit on his right.
- c. Although one unit is specifically charged with establishing and maintaining communication with another unit, it is only through the joint effort of all concerned that communication is assured. If communication is lost, all affected units seek its immediate re-establishment.
- 73. MISSION AND ORGANIZATION OF COMMUNICATION PLATOON. a. The regimental communication platoon installs, operates, and maintains all communication facilities for the regimental headquarters. It also establishes and maintains communica-

tion down to, but not within battalions, separate companies, and attached units. It provides continuous effective communication by the most appropriate means.

- **b.** During operations the communication platoon normally is organized into a platoon head-quarters and three sections. Each section is organized into teams. Varying tactical conditions determine the number and size of teams.
 - (1) The platoon headquarters consists of the platoon leader, the communication chief (communication sergeant), and a truck driver.
 - (2) The message center section consists of the message center chief, a message center clerk, code clerks, and foot and motor messengers.
 - (3) The wire section consists of the wire chief, a wire team chief, field linemen, switchboard operators, and truck drivers.
 - (4) The *radio and visual section* consists of the radio chief, radio operators, radio repairmen, and truck drivers.

74. DUTIES OF PLATOON HEADQUARTERS PERSON-NEL. a. The platoon leader commands the communication platoon and assists the regimental communication officer. His duties include—

- (1) Training and controlling his platoon.
- (2) Supervising the installation, operation, and maintenance of the signal equipment issued to his platoon.

- (3) Supervising the movement of communication installations when the command post displaces.
- (4) Assisting the communication officer and replacing him during his absence.
- (5) Seeing that the communication officer's instructions are carried out in the communication platoon.
- **b.** The *communication chief* (communication sergeant) is the principal enlisted assistant to the platoon leader. His duties include—
 - (1) Assisting the platoon leader in supervising the installation, operation, and maintenance of the signal equipment issued to the platoon.
 - (2) Coordinating the work between sections.
 - (3) Selecting locations for communication installations, when necessary.
 - (4) Supervising ground-to-air communication.
 - (5) Seeing that records are correctly kept.
 - (6) Organizing the advance echelon for displacement of the command post.
 - (7) Seeing that the vehicles are maintained and dispatched correctly.
 - (8) Keeping the platoon leader informed of the status of communication, equipment, and transportation.
 - c. The truck driver's duties include-
 - (1) Operating and maintaining the vehicle to which he is assigned according to TM's 21-300, 21-305, and 37-2810.
 - Performing communication duties as directed.

75. DUTIES OF MESSAGE CENTER SECTION PERSONNEL. a. The message center chief is responsible to the platoon leader for the discipline, training, and operation of his section. His duties include—

- (1) Selecting the exact locations for the message center and messenger station and establishing message center facilities.
- (2) Processing outgoing messages and selecting the method of transmission for each message.
- (3) Operating and maintaining message center equipment.
- (4) Checking the flow of message traffic and reporting to the originator when a message cannot be delivered within a short time.
- (5) Maintaining current information on the effectiveness of each means of communication.
- (6) Supervising cryptography.
- (7) Signing for messages delivered by scheduled messenger.
- (8) Posting message center signs or guides.
- (9) Supervising messenger communication.
- (10) Maintaining a supply of message center forms.
- (11) Preparing records and reports as directed.
- (12) Maintaining a record of the locations of command posts of units with which the regiment maintains communication and the best routes to them.
- (13) Keeping the official time.

- b. The message center clerk's duties include-
 - (1) Assisting the message center chief.
 - (2) Supervising one of the message center teams during displacement of the command post.
 - (3) Receiving, recording, and distributing incoming and outgoing messages and publications.
- c. Code clerks' duties include-
 - (1) Encrypting and decrypting messages, using authorized codes and ciphers.
 - (2) Maintaining a code clerk's file.
 - (3) Processing encrypted messages, to include inserting the call signs when the messages are to be transmitted by an electrical means.
 - (4) Performing other communication duties as directed.
- d. Messengers are selected for their courage, endurance, and self-reliance. Their duties include—
 - Carrying oral or written messages during daylight or darkness under all conditions of terrain, weather, and enemy activity.
 - (2) Performing other communication duties as directed.
 - (3) Driving and performing required motor maintenance in the case of motor messengers. For further information on messengers, see FM 21-75.
- 76. DUTIES OF WIRE SECTION PERSONNEL. a. The wire chief is responsible to the platoon leader for

the discipline, training, and operation of his section. His duties include—

- (1) Selecting the exact locations for wire installations.
- (2) Supervising the installation, operation, and maintenance of the wire system.
- (3) Selecting routes for wire lines.
- (4) Preparing line route maps, circuit diagrams, and traffic diagrams.
- (5) Seeing that the wire section personnel use prescribed technique in performing their duties.
- (6) Keeping records.
- (7) Keeping the message center chief and the platoon leader informed on the status of wire communication.
- b. The wire team chief's duties include-
 - (1) Assisting the wire chief.
 - (2) Organizing the field linemen into teams for laying and maintaining local and trunk wire lines.
 - (3) Selecting wire routes and preparing line route maps and circuit diagrams.
 - (4) Supervising the installation and maintenance of wire circuits.
 - (5) Seeing that the wire lines are laid so as to minimize damage from traffic and enemy fire.
 - (6) Seeing that the field linemen use prescribed technique in the installation and maintenance of the wire system.
 - (7) Keeping the wire chief informed of the

status of wire supply and the service-ability of wire circuits.

Field lineman's duties include-

- (1) Installing, testing, and maintaining wire circuits, switchboards, and telephones.
- (2) Climbing poles; tagging, testing, and splicing field wire.
- (3) Laying wire lines so that damage from traffic and enemy fire is minimized.
- (4) Locating and correcting trouble in wire lines.
- (5) Recovering, inspecting, and servicing field wire (time permitting).
- (6) Operating switchboards, when necessary.
- (7) Reading maps, line route maps, overlays, aerial photographs, and circuit and traffic diagrams.
- (8) Performing other communication duties as directed.
- (9) Using prescribed technique in performing their duties.

d. Switchboard operators' duties include-

- (1) Installing, operating, and maintaining switchboards.
- (2) Preparing and maintaining traffic diagrams.
- (3) Routing traffic and re-routing calls when normal circuits fail.
- (4) Using prescribed procedure in answering and placing calls.
- (5) Supervising traffic to insure satisfactory service to the user.

- (6) Knowing their unit organization and the names of the commanders and staff officers.
- (7) Being alert and courteous at all times.
- (8) Performing other communication duties as directed.
- e. For the truck drivers' duties, see paragraph 74c.

77. DUTIES OF RADIO AND VISUAL SECTION PER-SONNEL. a. The radio chief is responsible to the platoon leader for the discipline, training, and operation of his section. His duties include—

- (1) Selecting the exact locations for radio and visual installations.
- (2) Supervising the installation, operation, and maintenance of radio equipment.
- (3) Seeing that visual signaling equipment is prepared for use.
- (4) Preparing operating schedules for radio operators.
- (5) Making sure that radio sets are operated according to prescribed procedure and current communication orders.
- (6) Supervising the maintenance of communication security, including the use of authorized codes, ciphers, and authentication systems.
- (7) Keeping records.
- (8) Keeping the message center chief and the platoon leader informed of the status of radio communication.

b. Radio operators' duties include-

- (1) Installing, operating, and maintaining radio sets and associated equipment.
- (2) Using prescribed radio procedure and operating technique.
- (3) Using authorized codes and ciphers to encrypt and decrypt messages.
- (4) Observing communication security regulations and using authorized authentication systems.
- (5) Transmitting and receiving radiotelegraph and radiotelephone signals, printing pencil copy at prescribed speeds.
- (6) Servicing messages, maintaining a station log, and disposing of messages as directed.
- (7) Familiarizing themselves with the selection of radio sites and the characteristics and tactical use of their radio sets.
- (8) Transmitting and receiving visual signals in accordance with the plan for their use.
- (9) Keeping the radio chief informed of the status of radio communication.

c. Radio repairmen's duties include-

- (1) Inspecting, testing, and repairing radio sets and associated equipment and other electrical equipment issued to the company.
- (2) Locating and correcting defects by replacing parts, repairing defective parts, or making substitutes when replacement parts are not available.

- (3) Maintaining records of maintenance and modifications performed on each major item of signal equipment.
- (4) Maintaining the authorized level of parts for maintenance and keeping the radio chief and the platoon leader informed of the status of parts supply.
- (5) Notifying the radio chief and the platoon leader promptly when any item of signal equipment requires repair beyond the capabilities or facilities of assigned repairmen.
- (6) Striving to improve their ability to repair currently issued equipment and keeping abreast of new developments in radio and repair technique.
- d. For truck drivers' duties, see paragraph 74c.
- **78. DUTIES OF COMMUNICATION OFFICER.** As a member of the commander's special staff, the *communication officer's* duties include—
- a. Advising the commander and staff on communication matters and the command post location.
- **b.** Submitting recommendations relative to procurement and replacement of communication personnel.
- c. Assisting in preparing training directives pertaining to communication, and supervising the technical training of all communication personnel and others designated by the commander.
- d. Determining the requirements for signal equipment and supplies, and collaborating with

the supply officer in their procurement and distribution.

- e. Supervising the care, maintenance, and repair of signal equipment.
- f. Securing current signal operation instructions (SOI) and standing signal instructions (SSI) from higher headquarters and distributing complete copies to appropriate units.
- **g.** Preparing and distributing extracts of SOI and SSI.
- h. Preparing, for the commander's approval, orders, codes, and SOP needed for the technical and tactical control of the communication system.
- i. Making plans and recommendations for establishing a flexible and coordinated communication system within the regiment and between the regiment and other units.
- j. Submitting recommendations for paragraph 5 of the regimental operation orders, including the initial and subsequent command post locations.
- **k.** Assisting in selecting the exact location for the regimental command post, and selecting locations for communication installations within the command post.
- I. Supervising the installation, operation, and maintenance of communication facilities throughout the regiment.
- m. Coordinating communication with higher, adjacent, supporting, and attached units.
- n. Preparing plans for displacement or extension of the existing communication system.

- o. Supervising the maintenance of communication security, including the use of authorized codes, ciphers, and authentication systems.
- p. Keeping the communication platoon leader informed of the situation.

79. STAFF RESPONSIBILITIES AFFECTING COMMUNICATION. a. The adjutant's (S-1) responsibilities include—

- (1) Selecting the exact location for the regimental command post and deciding upon the interior arrangement of the command post (coordinates with the communication officer).
- (2) Selecting locations for the commander, the staff, and other command post installations exclusive of communication installations.
- (3) Directing the placing of signs or guides to indicate the location of the command post (may be done by the headquarters commandant).
- (4) Supervising the over-all movement of the command post.
- (5) Seeing that a summary of each message (including those not sent through the message center) is entered in the unit journal.
- **b.** The *intelligence officer's (S-2)* responsibilities include—
 - (1) Informing the communication officer of special security measures.

- (2) Arranging for communication with observation posts and other intelligence elements.
- (3) Supervising the collection of information of signal intelligence value.
- (4) Collaborating with the communication officer in preparing codes so that they are adequate for intelligence purposes.
- (5) Procuring maps for communication units.
- c. The operations and training officer's (S-3) responsibilities include—
 - (1) Coordinating communication for tactical operations with the communication officer.
 - (2) Giving timely information to the communication officer relative to contemplated operations and movement of the command post.
 - (3) Incorporating the communication officer's recommendations for paragraph 5 in operation orders prepared for the commander's approval.
 - (4) Collaborating with the communication officer in preparing codes for the operations.
- **d.** The *supply officer's (S-4)* responsibilities include—
 - (1) Procuring and distributing signal equipment and supplies (coordinates with the communication officer).
 - (2) Evacuating salvage and captured signal equipment.

- (3) Seeing that the communication vehicles have the necessary road priority.
- (4) Arranging for communication with supply installations.
- **e.** As headquarters commandant, the headquarters company commander's responsibilities include—
 - (1) Planning and organizing the security of the command post.
 - (2) Supervising the movement of command post impedimenta.
 - (3) Maintaining order and enforcing traffic and camouflage discipline in the command post area.

80. SIGNAL SUPPLY. Authorized items of signal equipment are prescribed in tables of organization and equipment. Additional equipment may be authorized by higher commanders. Initial supply and resupply are made through normal supply channels. Informal requests for replacement of signal equipment and supplies are submitted through normal supply channels. The regimental S-4 consolidates these requests and requisitions the equipment and supplies. The communication officer assists in preparing these requests and requisitions. Supplies are picked up under the regimental S-4's supervision at the division signal supply point, or other designated place, and returned to the regimental area. The S-4 makes the distribution to the units. The division signal company maintains a limited amount of signal equipment and supplies at the division signal supply point for immediate issue. The availability of supplies and estimated needs are coordinated by the communication officer and the division signal officer. Unserviceable signal equipment is replaced by exchange for serviceable items from the reserve stock at the division signal company. In an emergency, the communication officer may obtain signal supplies directly from a signal supply point.

- 81. MAINTENANCE OF SIGNAL EQUIPMENT. Each unit maintains and repairs its signal equipment within the limits of its maintenance facilities, available parts, authorized tools and test equipment, and the capabilities of assigned repairmen. Maintenance performed by using personnel includes protecting the equipment from weather and rough usage, cleaning and drying it, tightening screws, and making minor repairs and replacement of parts. When the equipment becomes inoperative, or an inspection reveals it may fail to operate because of excessive wear of some part or parts, it is turned in to the radio repairmen for repair. Unserviceable items that cannot be repaired within the regiment are sent to the division signal company for exchange, repair, or salvage. Repaired items are returned to the units. Utility equipment within the regiment can be used as replacements for unserviceable items until they are repaired and returned.
- **82. MEANS OF COMMUNICATION**. **a.** Signal communication includes all means of conveying information of any kind from one person or place to an-

other except by personal conversation and mail. In this manual, the term *signal communication*, is abbreviated to *communication* except where misunderstanding might result.

- b. The means of communication available to the regiment are wire, radio, messenger, visual, and sound. The composition of the means in each unit is limited by the men, equipment, and transportation provided by the tables of organization and equipment and the unit or higher commander. The various means of communication have different capabilities and limitations. They are used so that they supplement each other, and entire dependence is not placed upon any one means. The reliability of communication systems is greatly increased by the use of all practical means. The means used most in a given situation is the one that provides the maximum reliability, flexibility, secrecy, and speed with a minimum of effort and material.
- 83. WIRE COMMUNICATION. a. Wire is a principal means of communication and includes the use of field wire, wire-laying and recovery equipment, battery-operated and sound-powered telephones, switchboards, teletype equipment, and associated equipment. Except for the transmission of messages such as maps and documents, wire is the most effective means of communication. It affords person-to-person conversation with break-in operation (capability of interrupting the conversation). Wire is more secure than radio communication; however, security is never assured when

transmitting in the clear. The decision to establish wire communication depends upon the need for it and the available time to install and use it. The supply of wire on hand, the expected resupply, and the future needs also are considered. Wire communication can be used in most terrain and situations. Tables of organization and equipment provide the units with the equipment to install and maintain their wire communication systems. Figure 28 shows a typical wire system installed by the regimental communication platoon during defensive operations.

- b. Using battery-operated telephones the maximum operating range of field wire circuits is approximately 18 miles; the dependable range is approximately 10 miles. Using sound-powered telephones reduces the range to approximately 4 miles. The range of wire communication varies, depending principally upon the weather and the condition of the wire. Wet weather, poor splices, and damaged insulation reduce the range appreciably. The wire operating range can be increased by using electrical repeaters or amplifying telephones. Cable is used to increase the telephone range and the available number of circuits, but it is issued to the division signal company and higher echelons only.
- c. It takes longer to install wire communication than any other means. The time for installation depends mainly upon the length of the line and the method of laying it (vehicle or man-pack). Wire lines can be laid by men on foot at about 1½ miles per hour and by vehicle at 3 to 5 miles per

hour. In estimating the required time, it also is necessary to consider the number of available men, their training, the terrain, routes, weather, and visibility. Wire lines usually are laid by wire teams. The size of the team changes with the factors mentioned previously. The teams usually consist of three to five men, exclusive of men needed to carry extra wire when transportation is not available. One man can lay a wire line by using a wire dispenser or light reel. Besides the normal methods of installation, wire can be laid from dispensers attached to light aircraft or cast a short distance over an obstacle (such as a stream) by attaching it to a rifle grenade or rocket fired from a launcher.

- d. Wire lines are laid off roads with 15 to 20 percent slack. Wire is placed overhead in command posts or other areas where it is impracticable to bury it or leave it lying on the ground. In crossing roads wire is buried, placed overhead, or run under bridges and culverts. Areas are avoided where wire is likely to be damaged by traffic or enemy fire. Part of a wire team lays the wire and the remainder of the team polices it (throws it off the road, makes road crossings, splices, etc.). The laying of a line is not delayed for policing it.
- e. Switchboards are used to increase the flexibility of wire systems and to reduce the number of wire lines needed. The single-line capacity of switchboards varies; by using party lines the capacity can be increased. Sound-powered telephones without ringing devices connected to switchboards

require another sound-powered telephone at the switchboard to detect calls.

- f. The number of telephone messages that can be transmitted simultaneously over a wire system is limited. Calls are kept brief, and the telephone is reserved for occasions when there is a need for discussion, speed, and relative secrecy. During critical periods, the use of the telephone may be restricted to designated personnel, except for emergency calls. Telephones are not used for long reports or orders when another means can be used effectively. To reduce the time the telephone is in use and to facilitate entry in the unit journal, messages are written or notes are prepared before a conversation begins.
- g. When the volume of traffic warrants its use and the tables of organization and equipment or higher commanders provide the equipment, teletype service is established. Teletype operators require far less training and ability than radiotelegraph operators. Teletypewriters provide both headquarters with a written record of messages exchanged. They can be used on wire or radio circuits of sufficiently high quality to carry teletypewriter signals.
- 84. RADIO COMMUNICATION. a. Radio is a principal means of communication. Enough radios are provided to make radio communication available to all commanders, including platoon leaders. Additional radios are provided for command posts, fire control, and other uses. All radio sets issued within the regiment are capable of voice operation. This affords person-to-person communica-

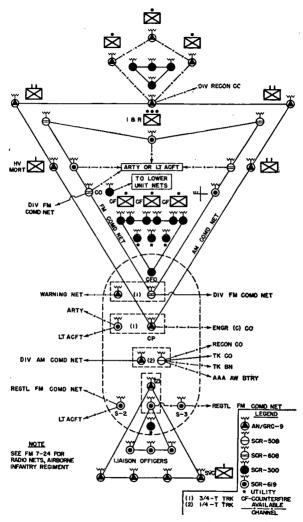


Figure 26. Type radio nets for an infantry regiment. (For radio nets, airborne division see FM 7-24.)

tion between ground stations and between ground stations and aircraft. Radio communication is less vulnerable to enemy fire than wire, but it is subject to interference from static, jamming, and other radio stations. Its reliability is limited by the skill of the operators. Figure 26 shows typical radio nets in which the regimental communication platoon operates.

- b. Radio equipment issued to the regiment includes portable, vehicular, and general use radio sets. Portable sets can be carried and operated by one man. Since vehicular sets get their power from vehicular storage batteries, their use is limited to situations and terrain where vehicles can be used. General use sets are provided where versatility is required. All of them can be operated from vehicular installations or removed for dismounted operation. Some of them can be removed from the vehicles and used as portable sets, while others are operated from stationary ground installations only. The principal characteristics of radio sets currently issued within the regiment are shown in figure 27.
- c. The tactical use of a radio set depends upon its characteristics. To be capable of operating together, radio sets must have a common or overlapping frequency range, transmit and receive the same type of signal, and be located within their operating ranges. The operating range given in technical manuals pertaining to an individual radio set is for average conditions; the range obtained may be more or less, depending upon the operator's skill, weather, terrain, interference, and

AN/GRC.9 W 15 MI VOICE STATIONARY AM 20 MI CW STATIONARY AM 20 MI CW STATIONARY AM 20 MI VOICE MOVING 10 MI	OPERATING RANGE SIGNAL	CHANNELS	TYPE OF OPERATION	FREQUENCY
3 Mi 3 Mi 6 Mi 6 Mi 6 Mi 6 Mi 6 Mi 6 Mi	TONARY ATIONARY AM-CW, MCW. NG VOICE	6 CRYSTALS AND CONTINUOUS TUNING	TRANSPORTABLE (3.MAN LOAD) OR VEHICULAR	2-12 MC
3 MI 10.15 MI 10.15 MI 10.15 MI 10.15 MI	. FM-VOICE	41 CONTINUOUS TUNING	VEHICULAR	40-48 MC
5 MI	FM-VÖICE	41 CONTINUOUS TUNING	PORTABLE	40-48 MC
S M S M S M S M S M S M S M S M S M S M	FM-VOICE	80: 10 PRESET 2 RECEIVERS	VEHICULAR	20-27.9 MC
M 10.15 MI	FM-VOICE	80 2 PRESET	PORTABLE OR VEHICULAR	20-27.9 MC
IM F	FM-VOICE	80 10 PRESET	VEHICULAR	20-27.9 MC
₩ 10-15 MI	AM-VOICE	50 1 PRESET	PORTABLE	3.5-6 MC
D.	FM-VOICE	120: 10 PRESET 2 RECEIVERS	VEHICULAR	27-38.9 MC
SCR-619 W	FM-VOICE	120 2 PRESET	PORTABLE OR . VEHICULAR	27-38.9 MC

Figure 27. Principal characteristics of radio sets in the infantry regiment.

the location from which the set is operated. Power lines and steel structures located close to operating sites reduce operating ranges. The greatest ranges are obtained between sites affording line-of-sight operation.

- d. Radio is the least secure means of communication. It must be assumed that interception takes place every time a transmitter is placed in operation; therefore, communication security is a constant consideration when using radios. The enemy obtains information merely by knowing that radios are operating. He analyzes the number of radios in operation, the volume of traffic, or the location of sets which is particularly valuable intelligence. The use of radio may be restricted or prohibited for security reasons. Two important measures for defense against enemy radio intelligence are radio silence and cryptography. Normally, messages are encrypted before being sent by radio. The decision to silence radios or to send messages in the clear is made after all the factors have been carefully considered. For example, radios are not silenced when the need for radio communication outweighs the value of the information that the enemy might gain. Radios usually are not silenced within units in contact with the enemy. A message is sent in the clear when prompt action is called for and the urgency of sending the message in the clear outweighs the value of the information to the enemy.
- e. Since only one station can transmit at a time, the message-handling capacity of a radio net is limited. The time required for a message transmission to its addressee is primarily dependent

upon whether it is sent in secret or clear text and upon the volume of traffic of similar or higher precedence awaiting transmission. The speed and message-handling capacity of a radio net is increased by training all operating personnel in radio procedure, net discipline, and by training the using personnel in message writing. Messages usually are written before transmission.

- f. The power supply is an important factor in radio communication. Old dry batteries reduce the range of the sets or make them inoperative; therefore, an adequate supply of new batteries is needed for dry battery-operated sets.
- g. By the use of certain types of remote control equipment, a radio operator may be located at a distance from the set he operates. Other remote control units connect a radio set to a switchboard, which makes the radio available to commanders and staff officers through their telephones. For further details on remote control equipment and the interconnection of radio and wire systems, see TM 11-488.
- 85. MESSENGER COMMUNICATION. a. Messenger communication is available to all units. Most units are authorized messengers by tables of organization and equipment; other units train men to act as messengers, in addition to their primary duties. Messenger communication is the most secure of the means. It is flexible and reliable. Messenger service has some limitations. It is slow, vulnerable to enemy action in forward areas, and does not permit conversation between the originator and the

addressee. It is the only means available within the regiment for transmitting messages such as maps and documents. Messengers are used when security is required and the time of delivery by messenger is less than that required for transmission by other means, including cryptography. Messengers are the best means for transmitting long messages over short distances. They may travel by foot, motor vehicle, or aircraft. In the combat zone, a vehicle driver in addition to the messenger usually is provided for a vehicle used for messenger service. All commanders assist messengers in expediting the delivery of messages. The efficiency of messenger service is limited by the selection and training of the messengers.

b. Double messengers are used when the mission involves great personal risk. They keep within sight of each other, but far enough apart to avoid simultaneous ambush or exposure to the same shell or burst of fire. Very important messages may be sent over two different routes either by single or double messengers. Messengers are briefed on their route, rate of travel, and the location of the delivery points. They are told if an answer is expected. If a messenger loses his way or cannot locate the destination of a message, he reports to the nearest command post and requests assistance. When practicable, a daylight reconnaissance is made of the routes that are to be traveled at night. Oral messages are kept short and simple. They are not used when time and security permit their being written. Messengers memorize oral messages.

- c. When required by the urgency of the message, special messengers are used. When locations are fixed and the amount of traffic warrants a fixed schedule, a scheduled messenger service is established. Messenger relay posts may be established when messages are carried frequently between the same points or units and, by reason of distance, difficulties of terrain, or hostile activity, other messenger service is ineffective.
- d. Homing pigeons are an emergency method of transmitting messages from front to rear. The division signal company may issue pigeons in containers to the regimental communication platoon. In emergencies, pigeons may be dropped to isolated units. They should not be kept away from their loft more than 48 hours.
- 86. VISUAL COMMUNICATION. a. The use of visual signals is a supplementary means of communication and is available to all units. Visual signals are transmitted by flags, lights, pyrotechnics, panels, arm-and-hand signals, and other prearranged visual means, such as aircraft maneuvers. They are suitable for transmitting prearranged messages rapidly over short distances when their use is not prohibited for security reasons. The enemy may use similar signals for deception and confusion. Visual signals are easily misunderstood. They cannot be used during poor visibility or when line-of-sight locations are not available.
- **b.** Flags are issued to the tank company. They are used as prescribed in FM 7-35. Other units may improvise flags. Messages can be sent with

flags by using prearranged, semaphore, or International Morse code.

- c. Lights for communication purposes only are not issued. They may be used to send prearranged messages such as identifying units as friendly. The meanings are given in the SOI, or prescribed by the commander. Messages may be transmitted by lights, using the International Morse code.
- d. Pyrotechnics, including smoke, are issued in various colors and types. The meanings of certain signals are given in the SOI. Signals usually are included for identifying units as friendly, lifting or calling for fire, marking targets, and reporting an objective reached. To be effective, the transmission and reception of pyrotechnic signals are preplanned. Pyrotechnics can be used for communication within and between ground units, between ground units and aircraft, and between ground units on shore and ships.
- e. Two general types of panels are issued for communication with aircraft—marking and identifying panels and those for transmitting messages. Marking and identifying panels are made in bright fluorescent colors. They can be used to mark positions and identify units as friendly. Black and white panel sets for transmitting messages are issued for use on light and dark backgrounds, respectively. They are used to transmit brief messages or to identify a particular unit. This is done by using the combined panel system and panel recognition code, which is included in the SOI.
 - f. Infrared devices are used for signaling and

as landing and assembly aids. In amphibious operations, they are used as landing aids. Airborne units use them as assembly aids.

87. SOUND COMMUNICATION. Sound is a supplementary means of communication and is available to all units. Sound signals are transmitted by whistles, bugles, horns, gongs, klaxons, weapons, and other noise-making devices. They are used chiefly to attract attention, transmit prearranged messages, and spread alarms when their use is not prohibited for security reasons. They are kept simple to prevent misunderstanding. They are a rapid means of communication over short distances. Their range and reliability are greatly reduced by battle noise. Sound signals and their means are prescribed in the SOI or are assigned by commanders or by patrol leaders. Three long blasts of a whistle, horn, siren, or klaxon repeated several times or three equally-spaced shots or short bursts of fire normally are used to warn of an air or mechanized attack. Rapid and continuous percussion sounds made with the standard gas alarm or improvised devices (iron rails and empty shell cases) normally are used to warn of gas attack.

88. SIGNAL OPERATION INSTRUCTIONS (SOI) AND STANDING SIGNAL INSTRUCTIONS (SSI). a. The signal operation instructions (SOI) are a type of combat order issued for the technical control and coordination of communication within a command. They include items covering codes and ciphers, radio call signs and frequencies, telephone directory, and visual and sound signals. Current items

are listed in the index to SOI. The division SOI are prepared by the division signal officer and distributed to lower units. The regiment receives enough copies of the division SOI for distribution of appropriate extracts to the battalions and the heavy mortar company (support company in the airborne infantry regiment). Other regimental units are issued extracts prepared by the communication officers.

b. Standing signal instructions (SSI) may be issued in a separate publication or as a section of the SOI. SSI include items of operational data not subject to frequent change and instructions for the use of the SOI. They are prepared by the division signal officer and distributed to lower units. The regiment receives one copy of the SSI with each copy of the SOI and one copy for each unit receiving extracts of the SOI.

89. STANDING OPERATING PROCEDURE. An SOP is a set of instructions prescribing the manner in which routine jobs are done within a particular unit in the absence of instructions to the contrary. In the regiment the communication SOP is based on and conforms to the division SOP. The communication officer prepares the SOP for his commander's approval. Periodic revision of the unit SOP is necessary for its effectiveness and conformance with the next higher unit's SOP. An SOP is particularly applicable to the communication platoon because many of its operations are the same regardless of the type of tactical operation. The platoon is not bound to its SOP to the extent that flexibility and individual initiative are destroyed.

90. PARAGRAPH FIVE OF AN OPERATION ORDER. a.

Paragraph 5 of an operation order contains orders and instructions relative to communication and command posts. The communication officer prepares it for his commander's approval. For staff coordination, see paragraph 76. The contents of paragraph 5 vary with the command's size, the SOP, and the situation. As a minimum, it contains the location of the issuing unit's first command post or the place to which messages are to be sent. The establishment of wire and messenger service to initial command post locations is facilitated in certain situations when the next higher commander designates the locations for lower units. This is not done when there is doubt as to where a lower unit can establish its command post.

- **b.** Paragraph 5 can be oral or written. Applicable portions of the following instructions are covered in this sequence:
 - (1) A reference to the signal annex or index to the SOI in effect; restrictions, if any, on the use of any means of communication; visual and sound signals; and other information not contained elsewhere in paragraph 5, such as lateral lines to be laid.
 - (2) The command post location of the unit issuing the order, the prescribed locations of the command posts of the lower units, and the axes of signal communication. The time of opening the command posts also may be given. The information relative to command posts and axis may

- be shown on an operation map or operation overlay. In this case, it is necessary to give a reference to the operation map or overlay only.
- (3) The location and time of opening an advance message center, march-control point, or other place to which messages may be sent.
- 91. ORAL COMMUNICATION ORDERS. After his communication plan is approved, the regimental communication officer issues oral orders to the regimental communication platoon leader. The installation of the communication system may be expedited when available section chiefs also are present. The urgency of the situation may require the communication officer to issue orders directly to the communication chief or the section chiefs. In this case, the platoon leader is informed of the situation as early as possible. The platoon leader's oral orders to the communication chief and the section chiefs may be supplemented by an operation map. Detailed orders for routine operations governed by the SOP are not included. The platoon leader's oral orders include-
- a. Information of the enemy and friendly forces as required for the efficient operation and security of the communication system.
 - b. The platoon mission.
- c. Instructions to each section chief, which may include any or all of the following:
 - (1) Instructions to the message center chief concerning the location of the message center and messenger station; schedules

- and routes; use of codes and ciphers; command post location of lower, attached, supporting, adjacent, and next higher headquarters, and routes to them.
- (2) Instructions to the radio chief concerning the location of radio installations; operation instructions and schedules; use of voice radios; location of panel display, message-drop and message pick-up grounds; and restrictions, if any, on using radio and visual means.
- (3) Instructions to the wire chiefs concerning the switchboard location; number and location of local telephones (including long locals such as the line to the observation post); number and routes of truck lines; and applicable special instructions (may be clarified with a circuit diagram and a line-route map).
- **d.** Administrative details including locations of the motor park, bivouac area, and division signal supply point.
- 92. COMMUNICATION SECURITY. a. Communication security is the protection resulting from all measures designed to prevent or delay unauthorized persons from gaining information of military value from communication sources. It includes physical, cryptographic, and transmission security. Commanders see that communication security orders and regulations are understood and observed by all men concerned with communication. Officers and enlisted men who personally

transmit radio messages are concerned particularly with security measures. The commander establishes communication security measures by stating general principles in the unit SOP, by announcing before an operation the extent to which security is to be practiced in that operation, and by making security decisions during an operation. When prompt action is called for, he considers the time in which the enemy can act on the information contained in a clear-text message. He then decides whether the urgency of sending a message in the clear out-weighs its value to the enemy. Messages that compromise the plans, operations, or cryptosystems of other units are not transmitted in the clear. Messages to be transmitted in the clear by radio operators (including those sent through message center) are marked send in clear. They are signed by the commander of his authorized representative.

b. Physical security protects the signal equipment and classified documents (including plain-language copies of messages and carbons) from capture, damage, or loss. Critical items—such as SOI codes, and ciphers are limited in distribution. Complete SOI are not taken forward of the front-line battalion command posts. Before a command post is vacated, it is inspected for messages, carbons, converter tapes, and copies of maps or orders. Wire lines are patroled to prevent the enemy from tapping them. When SOI, codes, or cryptographic equipment are lost or captured, the facts are reported promptly to the next higher commander. Instructions are issued on how to destroy

equipment and classified documents to prevent their capture or use by the enemy.

- c. Cryptographic security uses technically sound cryptosystems and strict observance of instructions. These measures prevent or delay the enemy from reading messages. Time spent in encrypting gives a high return in security. The use of cryptosystems other than those authorized by the unit SOI compromises security. Most unauthorized systems are susceptible to easy solution and give the user a false sense of security. Security hazards may be minimized by being brief and avoiding stereotyped phraseology in preparing messages (particularly at the beginning and end of a message). Identical messages are not sent in both clear and secret text. When using clear text, landmarks that can be associated with encrypted map locations are avoided as references. When messages cannot be sent in the clear, individuals and small units that do not have cipher devices use prearranged message and operations codes. When using codes that are used by other units, clear and encrypted text (except coded map locations) are not mixed in the same message. When authorized, a reasonable degree of security can be obtained by using codes prepared locally, according to the SOI, and frequently changed.
- d. Transmission security limits the enemy's ability to intercept transmissions and prevents him from using our communication systems for deception. A message is transmitted by the most secure means available, consistent with its precedence. Radio is particularly susceptible to inter-

ception, position-finding, traffic analysis, and deception. The radio operators are told about the dangers of giving information to the enemy through faulty operating procedures or techniques. Operators and men preparing radio messages must be aware of the enemy's ability to gain information from radio traffic. Those transmitting clear-text messages by voice radio use prescribed radiotelephone procedure and preplan the content and wording of each transmission. They use prescribed authentication systems and eliminate unnecessary transmissions. A high standard of net discipline among operators is essential in maintaining communication security. Training in the correct procedure is continuous. For additional information on communication security, see AR 380-5 and JANAP 122.

93. COMMUNICATION TRAINING. a. Communication training is conducted in these phases individual, unit, and combined. During basic military training and advanced individual training, the communication personnel are trained in basic military subjects. They also receive some specialist training in their primary duties. (See TM's 11-450, 12-406, and 12-427.) Each man is taught how to fight. Specialist training is conducted best in division and lower unit schools (particularly applicable to radiotelephone and radiotelegraph operators). Certain specialists, such as communication officers, communication chiefs, and radio repairmen, should receive their training at service schools.

- b. During basic and advanced unit training, specialist training is completed, and communication personnel are trained in the communication technique for all types of tactical operations. Before participating in exercises involving entire units, command post exercises are conducted with commanders and staffs present. This develops skill in procedures for the installation, operation, and movement of command posts. The personnel are trained to install, operate, and maintain communication systems in fast-moving situations, during all conditions of weather, visibility, and terrain.
- c. In the combined training phase (combined arms training) tactics and techniques of communication units working with higher, supporting, supported, attached, and adjacent units are perfected. This phase includes field exercises and maneuvers. As specialists become proficient in their primary duties, they are rotated to learn the communication duties of other selected key members of their unit. For further details, see current ATP's.

Section II. COMMAND POSTS

94. GENERAL. a. The regimental command post is the regiment's field headquarters. When the headquarters is divided into a forward and a rear echelon, the forward echelon is the command post. The command post group consists of the personnel and equipment needed to provide immediate assistance to the regimental commander. Although

the commander frequently goes forward to observe and direct the action, he remains in communication with the command post. Contact with the commander can always be secured at or through the command post. All communication facilities center at the command post. Administrative activities not required at the command post are conducted at the rear echelon.

- **b.** The command group consists of the regimental commander, his staff, liaison personnel, and the required enlisted men. It includes enough communication personnel to install, operate, and maintain the communication facilities.
- c. The division commander or the regimental commander designates the first location of the regimental command post. Higher, lower, and supporting units are kept informed of its location.
- 95. SELECTION OF LOCATIONS. When the division commander does not designate the location of the regimental command post, the regimental communication officer, after securing staff coordination, recommends its location. His recommendation is based on the following factors, whose relative importance depends upon the situation:
- a. Type of tactical operation. During movement to contact, the command post moves by bounds along a designated route, or it is located at a designated place in the formation. In offensive operations, it is located well forward to avoid early displacement. In defensive operations, it is located so that local enemy penetrations will not cause displacement. In other types of tactical operations, the command post is located at the place

from which the commander can control his regiment most effectively.

- b. Disposition of troops and the plan of operation. A command post remote from its units places an unnecessary burden on the communication system, delays the transmission of orders and information, and makes tactical control difficult. The locations of the higher headquarters and the unit making the main effort also influence the command post location.
- c. Signal communication requirements. Command posts are located to facilitate signal communication. An improperly-located command post may delay the establishment of communication at a critical time or make maintenance of effective communication impossible. The principal considerations for the command post location with respect to signal communication requirements are—
 - (1) Effect of distance and terrain on wire and messenger communication.
 - (2) Necessity for wire routes to the front and rear permitting the prompt establishment of wire communication.
 - (3) Effect of power lines, electrical stations, hill masses, dense woods, and distance on radio communication.
 - (4) Dependency on open terrain for use of drop, pick-up, and panel messages.
 - (5) Necessity for line-of-sight locations, visible only to friendly troops, for use of visual communication.
 - d. Routes of communication and traffic conditions. Since all communication facilities center at the

command post, roads into and out of the command post and the traffic to be expected on these roads influences the command post location. Messengers, wire teams, command vehicles, and other vehicles constantly use the communication routes from the command post forward to lower units and back to higher units. The absence of suitable communication routes causes delays and makes tactical control difficult. When practicable, messengers and wire teams use roads.

- e. Space for command post installations. The various installations within the command post are given enough space to operate efficiently and to avoid unnecessary casualties from enemy action. The minimum distance between installations outside of structures is 50 yards. Space is provided for other command posts that may be located in the vicinity and for liaison and agent personnel from other units. An alternate command post location in the general area may be necessary.
- f. Cover, concealment, and security. In selecting the command post location, consideration is given to the availability of natural concealment, cover, and defensive positions. The command post is located at least 200 yards from any landmark or terrain feature that is likely to attract hostile fire or air attack. A location that cannot be seen from main roads is preferable. For security reasons the command post may be located with a lower unit.
- g. Proximity to good observation. It is desirable to have an observation post close to the command post so that the commander can be close to the action and to his assistants at the command post.

It facilitates communication and the movement of the command posts and observation posts.

96. DESIGNATION, MARKING, AND TIME OF OPEN-ING. The command post location is designated near some convenient landmark that is easily identified on the map and on the ground. In terrain lacking easily recognized landmarks, the regiment often is directed to select and report its command post location. The exact site is selected in the general area of the designated point. When shown on a map, the flagstaff base is placed at the designated location. The route leading from the designated location to the exact command post location is marked by signs or guides. Guides only may be used for security reasons. When signs are used, they are large enough to be seen and read from a rapidly moving vehicle. When the command post is in a town, the main roads leading into the town are marked, beginning at the entrance to the town. The headquarters commandant is responsible for placing signs and guides leading to the command post. When he is not present, the S-1 assumes this duty. The message center places the signs or guides to direct incoming messengers to the message center. The command post is opened at the designated time, or when no time is given. as soon as practicable after the order is issued.

97. INTERIOR ARRANGEMENT. a. The regimental adjutant (S-1) is responsible for the command post's interior arrangement. He selects the locations for all activities except the communication installations. The regimental communication offi-

cer selects the locations for the communication facilities. During training, an SOP for the command post arrangement is represented in schematic form to show the locations of command post installations and activities in their relationship to each other (fig. 25). This SOP is used as a guide, and modifications are made as required by the terrain and the tactical situation.

- b. The commander and his staff are situated so that it is easy for them to hold conferences and enter or leave the command post. The characteristics of the means of communication are considered in locating communication installations to serve the commander and staff in the best possible manner.
- c. The message center is located at the natural entrance to the command post so that incoming messengers may find it easily and outgoing motor messengers can be dispatched quickly. A messenger station is selected nearby. Motor vehicles used by messengers are located conveniently with respect to the message center and messenger station.
- d. The radio station is located at the site that provides the maximum efficiency in transmission and reception. Other considerations include convenience to the user (especially the message center); location of the panel display, messagedrop and message pick-up grounds; mutual interference between radio sets; and the possibility of radios being located by enemy direction-finding equipment. Sets used with remote control equipment are located without regard to the user.

Motor vehicles with radio sets installed usually are parked at the radio station.

- e. The panel display, message-drop and message pick-up grounds should coincide, when practicable, and be near the radio station whose personnel are used for their operation. Level, open ground, free from high weeds and brush and removed from bodies of water, is preferable. The panel display ground should be situated so that observers can read displays at side angles from the vertical. Shadows are avoided, where possible. Unobstructed approaches to the message pick-up ground are required. This field also serves as an emergency landing strip for light aircraft.
- f. The *switchboard* is installed in a location convenient to income wire circuits and affording as much freedom from noise and interference as possible.
- g. Telephones are installed as required, according to the priority established in the regimental SOP. A telephone for the message center is given a high priority. Initially, telephones are shared by two or more officers. The executive officer uses the regimental commander's telephone. The S-2 and S-3 share one telephone, and the S-1 and S-4 use one jointly. Additional telephones are installed as rapidly as time permits.
- h. The *motor park* is established in a covered location accessible to vehicle and at a distance from the command post. It is located so that its detection from the air will not disclose the location of the command post.

98. OPERATION AND CONDUCT OF PERSONNEL, a.

The command post is organized for 24-hour operation. During less active periods, the men take every opportunity to rest and prepare for more active periods. Then men on duty are rotated so that they have an opportunity to rest. Communication personnel are continuously prepared to establish new channels of communication and maintain existing channels. Wire lines are particularly vulnerable to enemy fire and are repaired promptly, when damaged. Enough means of communication should be available at all times to transmit and receive messages rapidly and efficiently.

- b. All incoming special messengers report first to the message center where they are directed to the sergeant major. He signs for the messages or tells the messengers where and to whom they are to be delivered. Special messengers report again to the message center before leaving the command post to pick up any messages for delivery to their unit or activity. Scheduled messengers deliver their messages to the message center; the messages are signed for and delivered to the sergeant major by the message center personnel. He supervises the circulation of all incoming messages to the proper officers and their entry in the unit journal.
- c. Outgoing written messages usually are sent through the message center. The message center records include a live file (duplicates or skeleton copies of outgoing messages for which a receipt has not yet been obtained), a dead file (duplicates

or skeleton copies of receipted outgoing messages), and a message center log (a record of the electrical means of communication available and the numbers of outgoing messages). The dead file is turned over periodically to the adjutant for disposition. Officers who send or receive messages that do not pass through the message center see that a synopsis of each message is made available without delay for entry in the unit journal. For further information on command post operations, see FM 7-40. For detailed message center procedure, see appendix IV.

- d. Traffic in and out of the command post is controlled. Visitors are stopped at a dismount point and directed to walk from there. Their vehicles are sent to the parking area. When possible, the communication vehicles required in the command post travel at reduced speed and use existing roads and trails. The troops wear the prescribed uniform and carry the required individual equipment. They work as quietly as possible and avoid unnecessary grouping. Individual and organizational equipment not in use is stored neatly or left packed so that the command post can move quickly. Sanitation and police are rigidly enforced. Latrines are set up near the command post with sufficient capacity to accommodate all personnel. Trash is buried; a fire might disclose the location of the command post to the enemy.
- 99. LOCAL SECURITY AND DEFENSE. The headquarters commandant is responsible for the command post security. Normally, the security platoon pro-

vides local security as the headquarters commandant directs. Plans are prepared for defending the command post. All command post personnel are prepared and trained to assist the security platoon in defending the command post. Hasty entrenchments may be dug to provide individual protection and for defense of the command post. Communication installations may be dug in to protect the equipment and permit continuous operation. The maintenance of secrecy as to the command post location is important. The use of unshielded lights is prohibited. Camouflage is used, where necessary.

100. AXIS OF SIGNAL COMMUNICATION. The axis of signal communication is the route along which future command posts are established. When displacement of the command post is anticipated, the division commander or the regimental commander designates the axis of signal communication. They designate it by giving successive probable command post locations in the direction of movement or a specific route, such as a road or stream, along which the command post will move. In terrain lacking easily recognized landmarks, the regimental commander usually designates the axis of signal communication. The route method normally is used in rapidly moving situations. The axis extends to the final objective or far enough to provide a guide for displacing the command post until further orders can be issued. The regiment takes advantage of any situation that permits it to use the same axis as a lower unit. This practice saves wire and labor, simplifies the communication system and expedites its establishment.

- 101. DISPLACEMENT. a. Displacement of the command post is coordinated to avoid disrupting communication and losing control. Before a location is changed, the minimum communication facilities required at the new command post are established. This requires that the communication officer be notified well in advance of the estimated time of displacement. Other units concerned are notified of the contemplated change. When the new command post location is not already prescribed. the S-3 confers with the communication officer and submits recommendations for the new location to the commander. A quartering party, including the S-1, the communication officer, guides. and security and communication personnel, goes to the new location. The communication platoon's advance echelon may follow the quartering party. The exact site is selected, and the locations for the different installations are designated. Communication is established, and guides and security personnel are posted.
 - b. When the command post site is ready for occupancy, the commander is notified. The command group moves to the new location according to his instructions. Enough personnel, including communication personnel, remain at the old command post to operate and close it. On the commander's orders, the old command post is closed and the new command post opened at the same time. All communication personnel go to the new command post except a guide who remains to

direct messengers to the new location. When radios and messengers are the only available communication means from the regiment to the lower units, displacement can be made as rapidly as wire communication with the division can be established from the new location. When only radio and messenger communication are used to lower units and division, the command post can be moved without the delay caused by laying wire lines.

Section III. TACTICAL EMPLOYMENT

102. MOVEMENT TO CONTACT. a. Communication in route column is limited to that for transmitting administrative orders. During movement by rail, all unit communication normally is suspended.

b. During movement in tactical column, communication is provided between the regimental march command post and the division commander. adjacent columns, reconnaissance and security elements, lower unit command posts within the column, and supply trains. Communication also is maintained within units in the column. The principal means of communication are radio, motor and foot messengers, and aircraft, when available. They are supplemented by visual and sound signals. Pigeons, when provided, may be used from a unit to a fixed loft. When secrecy is necessary, the radios are restricted or silenced. Orders for the march cover the axis of signal communication, use of the means of communication, and command post locations. When information required in the order is covered in the unit SOP, the order merely refers to appropriate parts of the SOP.

- (1) Radio is an effective means for controlling units during a march. Command nets may be organized to include platoons. Some secrecy of movement is achieved by using codes and by reporting positions in reference to phase lines and march objectives. Radio nets are organized so that the operating ranges are not exceeded. All commanders and operators familiarize themselves with the details of the net organization and codes. The radio ranges are reduced during movement and when line-of-sight locations cannot be selected. Light aircraft radios and radios with liaison officers are helpful in establishing radio communication with adjacent columns and between units in extended columns.
- (2) Messengers are used by all units during a march. Foot messengers are used from front to rear. Motor messengers are sent to the front or rear, and are used between adjacent columns. Messages can be exchanged between moving vehicles. Light aircraft messengers facilitate communication between adjacent columns, to the distant command posts of higher commanders, and within extended columns. Before the march begins, messengers are informed of the route, the formation, the locations of command posts, and special vehicular markings.
 - (3) Pyrotechnics are used for prearranged

messages. These include reporting when units reach march objectives or cross phase lines. They also include messages between ground units and aircraft, and antiaircraft or antitank warnings. When prearranged pyrotechnic messages are to be used, lookouts are assigned areas of responsibility in which to watch for them.

- (4) Panels are kept ready for use to identify friendly columns, vehicles in a column, command posts, and message-drop and pick-up fields to friendly aircraft. Panel teams may leave the column temporarily to communicate with aircraft.
- (5) Wire normally is not laid during a march. However, commercial wire systems and existing field wire circuits may be used.
- (6) Command posts are located to facilitate column control. Their locations in the column are prescribed and announced in orders. During motor marches, the regimental command post normally travels at the head of the regiment's main body. The advance guard command post travels at the head of the reserve. Command posts of other units in the main body are located at the heads of their respective units. During foot marches, command posts may be motorized and move by bounds between units. A motorized command post consists only of essential command and communication vehicles. Com-

munication vehicles include those for messengers, panel teams, radios used during the march, and additional radios for emergency use. A few wire vehicles required during or immediately after the march also are included. Communication personnel, not required during the march, travel in the headquarters company serial near the command group. Communication vehicles and transported personnel, not required to maintain communication during the march, move near the head of the regimental trains. Communication personnel who cannot be transported march with the headquarters company, which is usually at the head of the main body.

c. In the approach march, the means of communication used in tactical column are continued. Radio and messenger are the principal means of communication. Light aircraft, when available. and visual and sound communication are used to supplement the principal means. Communication security measures are continued. Prearranged message and operations codes are used extensively except when cleartest messages can be transmitted without violating security restrictions. As units assume extended formations or move across country, messenger communication becomes more difficult. Cross-country marches reduce the speed of the messengers and make march command posts more difficult to locate. Instructions to messengers are more explicit. The use of wire in the approach

march depends upon the rate of advance, the distance to be covered, future plans, the speed at which wire can be laid and the supply of wire. Premature establishment of the wire system results in the loss of wire and overextension of circuits. It delays the installation of communication for the next operation. March command posts are kept well forward, convenient to all command elements, and follow the best available communication routes. Communication personnel keep abreast of the situation, supervise the operation of the communication system, and plan continuously for future operations.

- d. During halts a limited communication system is established. During temporary halts, communication is the same as during the march. During overnight halts and other prolonged halts, messengers are used extensively. The use of radio may be limited by security restrictions. Wire is installed, but is limited by the available wire supply and the duration of the halt. It is desirable for the regiment to have wire communication to lower units during overnight halts. When a quartering party precedes the march, communication personnel are included to establish communication in the bivouac or assembly area. Communication, including wire, is established to and within the outpost. The communication system within the outpost is similar to that used during defensive operations.
- e. In the assembly area, temporary command posts and a limited communication system are established. The same means of communication

are used as in prolonged halts during the march. The communication officer is given timely information of the commander's plan for the next operation. He must have time to make his reconnaissance and submit recommendations for a communication system and command post locations for the next operation. Installing the communication system is easier when the first location for the regimental command post is in the assembly area. When the first command post is to be forward of the assembly area, the communication platoon's advance echelon moves to command post location early, and installs the communication system before the next operation.

- 103. ATTACK. a. As soon as the communication officer is informed of the attack plan, he makes a map reconnaissance and a tentative plan. When possible, he discusses this plan with the S-3 and then makes a ground reconnaissance. He takes wire personnel and other platoon members with him. He submits his recommendations to the S-3 for paragraph 5 of the operation order.
- b. Following the issuance of the attack order, the communication officer complete the coordination of his plans with the S-1, the S-2 and the S-3, the battalion communication officers, the tank and heavy mortar companies, and the direct-support artillery. He then proceeds to the designated command post area with the S-1 to determine its exact location and interior arrangement. As soon as possible after the first command post location has been approved, the communica-

tion officer instructs the communication platoon leader, and the bulk of the communication platoon is sent forward. The platoon leader and his section chiefs may precede the platoon to the designated command post location to receive orders and to reconnoiter before the platoon arrives. The remainder of the platoon continues to provide communication in the assembly area until the command post for the attack is occupied.

c. As long as wire can be established and maintained in the attack, it is the principal means of communication. A wire construction team from the division signal company lays trunk lines from the division into the regimental command posts and remains with the regiment to extend and maintain these lines. The regiment does not break wire communication with division without prior notification. The field artillery battalion supporting the regiment lays a line to the regimental switchboard. The communication platoon lays one truck line to each assault battalion, one to the heavy mortar company, and one to each attached unit. Wire communication to a reserve battalion normally is given a low priority. Plans are made to lay a line when the reserve battalion is committed. A line is laid to the tank company when required by its location and the tactical situation. One circuit is established to the service company, either directly from the regimental switchboard or from a unit switchboard in the vicinity of the regimental field train bivouac. To avoid duplication of effort, the existing division wire system can be used. The observation post and certain radio remote control units are connected to the switchboard. The circuit to the observation post may be established through a battalion switchboard. Wire lines from higher and supporting units and to lower units may be simplexed to provide additional circuits (FM 24-20). When time is available, local lines are laid to the collecting station, the regimental fire information center, and the motor park. Sound-powered telephone equipment is provided for use within the counterfire and security platoons. Normally, lateral lines are not laid during an attack. Lateral communication is made through the next higher headquarter's switchboard.

- d. Maximum use is made of radio during the attack. To attain secrecy and surprise, the use of radio may be restricted until a prescribed time. A further restriction on the use of radio may be directed for maneuvering and reserve units before commitment. Radio silence is not carried to the point of becoming a handicap rather than a protection. When it is probable that the enemy knows the location or anticipates the movements of friendly units, or after contact is made, there is little to gain by imposing radio silence.
 - (1) Radio nets operated within the regiment are flexible and may be altered as required by the situation. The number of available frequencies varies. At times, more than one net may operate on the same frequency. The regiment communicates with division in two different command nets, one using amplitude-modu-

lated radio equipment and the other using frequency-modulated voice radios. Two regimental command nets are established to include the battalions, the intelligence and reconnaissance platoon, and the heavy mortar company. The radio sets operated in these nets are of the same types as those used for communication with the division. A command net is established between regiment and the tank company, using frequency-modulated voice radio sets. A special purpose net may be established including an amplitude-modulated set at the command post, one with each liaison officer, and one with service company at the field train bivouac area. When the amount of traffic does not justify a special purpose net, these sets may operate in the regimental amplitude-modulated command net. Each liaison officer is provided with a frequencymodulated voice radio for communication with the command post in a liaison net. Operation of these sets in the regimental frequency-modulated command net may be authorized.

(2) Radio sets are available communication with the regimental observation post and for direct communication with light aircraft, supporting artillery, engineers, and the reconnaissance company. A set also is available for operation in a warning net when one is established. Portable voice radios are used in the counterfire platoon for communication within the squads and between the squads and the counterfire officer at the regimental fire information center. These sets also can be used to communicate with the supported units.

(3) When the regimental commander leaves the command post, he takes the required radios and operators with him. The types of these radios are determined by the nets in which he desires to communicate.

104. REORGANIZATION. The means of communication used during the attack are continued in operation during reorganization. The communication platoon leader determines personnel and equipment losses and takes action to obtain replacements. Pending the arrival of replacements, he reassigns duties and reallocates equipment and supplies. He submits recommendations for improving the communication system to the communication officer, including necessary movements of the command post, and keeps him informed of the communication platoon's status.

105. PURSUIT. When the regiment is advancing to gain contact, or encircling the enemy, the use of the communication means is similar to the tactical column or approach march phases of a movement to contact. A regiment in contact with

and maintaining direct pressure against the enemy uses its means of communication as during the attack. Pursuit requires extensive reliance upon radio for communication. When organic radio sets do not provide adequate operating ranges, arrangements are made to secure vehicular sets that are capable of operating over greater distances from the division signal company. The importance attached to enemy interception of radio traffic in other situations does not apply in equal degree during a pursuit. Generally, messengers are motorized. Existing wire lines along the pursuit routes are used when they are serviceable or can be repaired promptly.

106. DEFENSE. a. The communication system for a defense is more elaborate than for an attack. Two or more wire lines are laid over different routes between the command posts of the regiment and front line battalions. Lateral lines connect the command posts of adjacent regiments and battalions. One or more wire lines are laid to the heavy mortar company. Wire is laid to the reserve battalion, the tank company, the collecting station, and the regimental observation posts. Wire communication is established with the service company in the same way as during the attack. A wire construction team from the signal company lays and maintains at least two wire lines between the division and regimental switchboards. The direct support artillery battalion lays two lines to the regiment over different routes. Simplex and phantom circuits are used to provide additional channels of wire communication (FM

- 24–20). When required by the volume of traffic, scheduled messenger service is established. For security reasons, radio communication usually is restricted until the enemy makes contact with units in the battle position. When wire communication is available, radio transmitters are not used. When wire communication is interrupted or becomes inadequate, however, radio nets are open and ready for use. The communication system is constantly improved. All possible steps are taken to provide uninterrupted operation of communication. For the regiment's defensive wire system, see figure 28.
- **b.** Communication to the advanced covering force and to the general outpost is established by higher commanders. Communication to the combat outpost is established and maintained as the regimental commander directs. When the front line battalions establish the outpost, each battalion usually provides communication to its part of the outpost. When possible, the communication system within the outpost includes a wire line from each outguard to the outpost commander. (FM 7-24).
- 107. WITHDRAWALS. a. Communication during withdrawals from action is characterized by detailed planning in advance and close coordination during the withdrawal. Existing communication channels are maintained as long as available equipment and restrictions imposed by higher commanders permit. (FM 7-40).
- **b.** When the regiment is forced to execute a daylight withdrawal, the communication platoon,

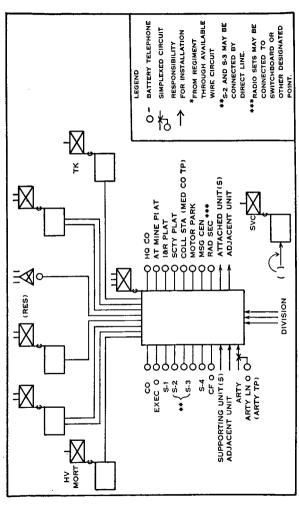


Figure 28. Typical regimental wire system in defensive operations.

when possible, establishes, operates, and maintains communication facilities similar to those required in a night withdrawal. However, a daylight withdrawal seldom permits as much detail planning and preparation as a night withdrawal.

- c. A night withdrawal is characterized by deliberate planning, detailed reconnaissance, and extensive supervision. The communication plan is carefully made to support the tactical plan. During the movement to the rear, communication is necessary in the old position and within the new battle position, or area in which the regiment is assembling.
 - (1) Reconnaissance of the withdrawal routes determines what existing wire circuits can be used. Communication is provided to assembly areas, march-control points, and between the forward and rear positions. An early reconnaissance of the rear position is necessary for timely completion of the communication system there. Limits on the size of reconnaissance parties usually permit the communication platoon wire section personnel only to reconnoiter the new position. A daylight reconnaissance is made and critical points are marked and guides are placed so that they can be found easily at night.
 - (2) Existing communication facilities are maintained in the old position by the covering force. Command posts close on order, or when taken over by the cover-

ing force. Either the communication platoon leader or the communication chief (communication sergeant) remains with the covering force. The minimum additional communication personnel remain in the old position to operate the communication system for the covering force. When time permits, unused wire lines are recovered or sections are removed to prevent their use by the enemy. Deceptive measures include using dummy radio stations and simulating normal radio activity in the old position.

- (3) Messengers and available wire circuits are the principal means of communication during a withdrawal. The staff and liaison officers help the commander control the movement. Communication can be provided at march-control points by splicing telephones into existing wire circuits, whenever possible. Radio silence is ordered; however, the radio operators continue to listen on assigned frequencies. If the enemy discovers the withdrawal and more control is needed, the higher commander may direct that radios be used.
- (4) The majority of the communication platoon move to the rear position as early as practicable to establish communication facilities before the main body arrives. When the defense is to be resumed on the new position, a complete

defense wire system is installed as early as possible. Wire lines between the division and the old position are intercepted and connected to the regimental switchboard at the rear position. The radios continue to listen on assigned frequencies, but they remain silent until the regimental commander deem's operation necessary. When the withdrawal is to be followed by some other type of operation, minimum essential communication is established within the regimental assembly area and to the outpost until plans are made for the next operation. Reconnaissance and plans for communication for the next operation are completed as soon as possible.

108. DELAYING ACTION. In a delaying action, emphasis is placed on speed and mobility in establishing communication. Existing wire lines along the axis of operations are used during movement to the rear. A minimum lateral wire system is installed on each delaying position to include one line to each battalion and the heavy mortar company. Wire communication is maintained between the artillery and the regiment. Visual signals and motor messengers are used. Communication to distant, detached, and motorized or mechanized units usually is limited to radio and messenger. Timely reconnaissance and planning are necessary for communication on successive delaying positions. New wire lines usually are

not laid for communication between successive positions.

109. RETIREMENT. Communication during a retirement is similar to communication during movement to contact. When the enemy attempts to pursue vigorously, a series of delaying actions may be necessary to assist the retiring force to disengage. In this case, communication is maintained in the same way as described for a delaying action.

110. RELIEF IN CONTACT. Before the relief occurs. the communication officer and key men from the communication platoon, accompany the regimental commander and his reconnaissance party. They familiarize themselves with the communication system already in operation. Arrangements are made with the unit being relieved to leave their equipment and wire on the position. However, equipment requiring extensive installation is exchanged. During the reconnaissance, the key wire men familiarize themselves with all wire routes. The communication officer obtains a line-route map, circuit diagram, traffic diagram, and radio net diagram. He gets as much information as possible about road conditions and routes for messengers. He evaluates the conditions that affect radio communication and the probable interruptions of wire communication. When the relieving unit's commander assumes responsibility for the area. it takes over the communication system. Strict secrecy measures are taken to prevent the

enemy from discovering the relief. These measures may include continuing to use existing call signs, frequencies, codes, and ciphers of the unit being relieved.

- 111. AIRBORNE OPERATIONS. a. Special communication problems arise during the assault phase of an airborne operation. Because of the dispersion of the units on landing, speed of action, and distances involved, communication is relatively difficult to establish.
- b. During the assembly and reorganization of an airborne infantry regiment after landing, radio is the principal means of communication. It is supplemented by messengers and other means to a lesser degree. The installation of the wire system is started as soon as practicable. To facilitate and expedite the establishment of the wire system within the airborne regiment, wire laying teams and their equipment from the regimental communication platoon may be dropped with the battalions. Command radio nets usually are opened immediately after landing to help control and to speed the assembly. Portable radios are habitually carried into the landing area to facilitate prompt opening of radio nets on landing. Radio communication to the next higher commander is established immediately after landing. Communication with cooperating aircraft and naval forces is provided through tactical air control parties. When an airborne operation is near the seacoast, naval gunfire teams also may accompany the assault landing and provide communication with naval support craft.

- c. The size, weight, and amount of equipment landed with the parachute unit during the assault are limited. Only equipment that may be carried by the men or landed in equipment containers is available at first. This equipment includes portable voice radios and batteries, field telephones, light wire, panels, and small switchboards. Heavier radios can be broken down into their component parts and carried by two or more men. Larger reserves of communication supplies and equipment are necessary to compensate for losses during the landing. Resupply plans include equipment and supplies to meet communication requirements.
- d. Communication personnel are assigned throughout air serials. A parachutist radio operator assigned to a parachute unit commander or staff officer jumps next to him. Communication vehicle drivers land with their vehicles.
- e. To acquaint himself with the tactical situation and to receive additional information and orders, the communication officer assembles with the regimental commander and staff. He makes his plans flexible to meet any requirement of a rapidly changing situation.
- f. The communication platoon leader assembles the communication platoon. The platoon, less radio operators, wire teams and messengers on special assignments, normally assembles with the regimental headquarters company. The platoon leader reports the status of his men and equipment to the communication officer as early as possible. He directs the implementation of the

communication plan. He maintains contact with the communication officer to execute promptly any orders. The regimental command post is established immediately after the landing. When possible, it is opened in its predetermined location, or a guide is sent to the designated location to direct the messengers. After the units have assembled and established their command posts they exchange messengers.

g. Reorganization is not complete until the regiment has assembled according to plan, and until command and fire-control communication channels are established. After the initial airborne assault and the build up of troops and equipment, communication in the airborne infantry regiment is the same as any other infantry regiment for each type of ground operation.

112. ANTIAIRBORNE DEFENSE. Because of the widespread area assigned to a regiment in a defense against enemy airborne attack, the communication platoon has to lay extensive wire lines and provide numerous radio sets for adequate communication. Troop dispositions for antiairborne defense provide for a local warning system, a local defense force, and a mobile striking force. The regiment establishes warning stations at the most likely landing areas within its area of responsibility. These warning stations provide information on which the regimental commander bases his decisions for the defense. These warning stations are connected with the regimental command post by radio, wire, and visual com-

munication. The communication platoon provides the communication nets for these warning stations. Wire is buried a few inches underground to reduce destruction by enemy airborne troops. When available, commercial wire lines are used. Bombing before the airborne attack may interrupt wire communication; therefore, measures are taken in advance to provide for restoring damaged communication circuits rapidly. During the defense, the communication personnel who are not operating communication facilities provide a mobile pool for maintaining wire communication.

113. SPECIAL OPERATIONS, GENERAL, a. Communication is essential during all types of special operations. Applicable methods already discussed in the paragraphs above are used as a guide in its employment in particular types of special operations. Extreme terrain and climatic conditions impose additional problems in communication. Most of these problems can be overcome or greatly reduced by prior planning and special training. Each operation requires an estimate of the communication situation based on conditions to be encountered. The communication platoon and its equipment are used in the most effective way to meet the needs of the commander and staff. Communication sometimes may demand additional men and special equipment to supplement the men and equipment normally authorized. When the use of transportation is denied or restricted, heavier equipment may have to be replaced, and one or more means of communication may have to be relied upon to a greater extent than under more average conditions.

- b. A thorough knowledge of the conditions under which the regiment will operate is necessary during the training period. Specialized training to overcome problems that will be encountered is conducted under actual or simulated conditions. When a specialized training program cannot be completed in the available time, emphasis is placed upon those training activities that minimize the problems to be encountered during the operation. See FM 7-24.
- 114. ATTACK OF A FORTIFIED LOCALITY. Communication methods are generally the same as in any coordinated attack. Special arrangements are made for communication between tank units and infantry. Wire lines frequently are laid down to rifle companies. Additional radios are issued to small units. The communication system is enlarged to provide for additional observation posts and task forces. The platoons assigned special tasks may communicate directly with the battalions. Communication between the regiment and supporting artillery is more elaborate.
- 115. OPERATIONS AT RIVER LINES. Operations during a river crossing require communication facilities similar to those used in an attack. To avoid an early displacement and to facilitate control, command posts are located as close as practicable to the river. Wire lines across the river may be constructed in one of two ways. In the first

method, the battalions extend lines across the river as in normal operations. When this method is used, however, the battalion wire sections may require assistance from the regimental wire section. In the second method, the regiment constructs lines direct from the regiment across the river. When the crossing is made, the battalion wire sections tie into these lines; then they extend their lines in the normal manner. When bridges are not available, the messenger traffic across the river may use engineer assault boats. Other means of communication are subject to restrictions for security reasons. Radios usually are silenced until the units cross the river or the attack is discovered.

116. NIGHT OPERATIONS. Night combat requires blackout facilities for message centers, switchboards, and radio stations. Messengers, drivers, and linemen are oriented as to routes. To avoid making noise during movement and to provide continuous communication during night attacks, the wire parties use wire dispensers.

117. OPERATIONS IN BUILT-UP AREAS. Combat in towns requires maximum use of available communication facilities. To minimize the effect of enemy artillery and small-arms fire, command posts normally are located in cellars or other covered structures. Wire lines are extended from building to building rather than by laying the wire in the streets. Radios are affected adversely by structural materials. Elevated antennas may

be used. Buildings limit the use of visual means of communication.

118. OPERATIONS IN WOODS. Combat in woods presents no outstanding problems in temperate climates for the installation, operation, and maintenance of communication systems. Dense woods, which limit cross-country vehicular movement, require installing wire by hand. They may reduce the operational range of radios. They cause messengers to move slower than in open terrain. Visual communication is difficult because of the limited visibility.

119. MOUNTAIN OPERATIONS, a. Mountain operations limit mobility and require the use of portable equipment. The installation, operation, and maintenance of communication systems frequently are done without vehicles. Whenever roads or trails exist, vehicles are used for installing and maintaining wire lines and for transporting radio sets. Wire is laid with more care than in ordinary terrain to protect it from avalanches, rock falls. landslides, heavy storms, and deep snows. Greater care is taken in the handling and laving of wire. High winds and rough treatment frequently cause short circuits. Wire lines are tied down at regular intervals. With practice, a wire team can climb an easy route and swing wire over an adjacent and more difficult route. On steep slopes, wire is tied down frequently and tagged often to reduce interruptions of service and simplify maintenance. Because resupply is difficult, wire is reclaimed whenever possible. Light aircraft can be used to lay wire over extremely difficult terrain.

- b. Radio communication in mountainous terrain frequently is unreliable. The line-of-sight characteristic of frequency-modulated radio sets requires the careful selection of locations. The use of relay sets on the top of ridges aids high frequency sets in crossing these masks. Half-wave antennas, oriented to use directional characteristics, also are practicable. Radios increase in effective range on peaks and crests. The strength of radio signals is decreased in deep ravines. Radios located in rock caves and rock tunnels frequently can neither send nor receive. Moving a set a short distance often improves its transmission and reception. The extreme and rapid change in temperature in mountains makes it difficult to keep radio sets and batteries dry and at an even temperature. Radio operators protect their sets and carry extra batteries within their clothing during extreme cold.
- c. Visual signaling assumes increased importance in the mountains. Long lines of sight afford excellent visual communication. Visual equipment is carried more easily than other communication equipment. It also is improvised more easily. Observation at distances up to 4,000 yards is possible. Visual signaling devices that can be used include semaphore, wigwag, signal lamps, blinker lights, heliograph devices, hand lamps, flags, flashlights, and improvised flags. Radio operators use signaling devices using the Morse code. The average soldier can be trained to use the semaphore in five

to six hours. When other means are uncertain or too slow, pyrotechnics and smoke are used. Panels can be used on slopes between ground units as well as from ground to air.

d. Messengers require intensive training for mountain operations. A trained messenger with a map may lose his way even in the daylight. Messengers are trained to depend on terrain features for orientation. Messengers are sent over new routes during daylight, before operating at night. To familiarize themselves with landmarks at night, the messengers return over the same routes after dark. Double messengers are used frequently because of the possibility of being ambushed. Pigeons and messenger dogs can be used to carry messages to fixed locations.

120. OPERATIONS IN SNOW AND EXTREME COLD.

Combat in snow and extreme cold requires special communication considerations. Subzero temperatures, unrestricted but slow movement, and the use of small tactical forces affect communication in such operations. Communication personnel who operate message centers, radio stations, and switchboards are provided with suitable shelters. Other communication personnel are rotated frequently to prevent undue fatigue and overexposure to cold. Messengers are provided with extra items of warm clothing. Wire laying is difficult in cold weather. Track-laying vehicles with high flotation and wire-laying cargo sleds are desirable. Hand reels or wire dispensers may be mounted on small sleds or toboggans. Linemen and messengers are

trained to use skis and snowshoes. It usually is impracticable for combat troops to recover wire in snow; extra wire is carried or resupplied by air. The use of aircraft expedites the installation of wire lines. Long range radio communication frequently is unreliable. Batteries freeze, causing the equipment to fail to function. Cold weather batteries should be provided for battery operated radios. Equipment may be modified by connecting an external battery power supply cord to a battery carried within the operator's clothing. Frozen soil does not make a good ground for an electrical circuit. Ground poles are placed below the frost line. Light aircraft (aviation) are used to deliver messages and reconnoiter routes for wire lines. Colored pyrotechnics and panels are visible over great distances. Black signal panels are used on fresh snow for sending short, prearranged messages. Pigeons can be used. When practicable, communication loads are reduced by substituting light equipment for heavy equipment.

121. OPERATIONS AT DEFILES. Combat at defiles may require the convergence of wire lines. This increases their vulnerability to enemy shell fire. When the tactical situation permits, radio stations are located outside of defiles to avoid the masking effect.

122. JUNGLE OPERATIONS. a. In jungle operations all means of communication are adversely affected. All equipment is moisture-proofed and fungiproofed before it is taken into jungle areas. Dry

cell batteries deteriorate more rapidly than normal, even when not in use. At least twice the normal supply of dry cell batteries for more temperate climates is necessary in jungle operations. Plans include periodic drying out of communication equipment. Boxes with lights in them and exposure to the sun are effective means of drying communication equipment.

- b. The jungle vegetation reduces radio ranges. Thus, the operators are given additional practice in getting traffic through with weak signals. Radiotelegraph is more effective than radiotelephone. The reduced range limits the use of small radio sets. The operators are given special training in where to establish their sets and how to use elevated antennas to obtain maximum range. Special elevated antennas cause the impulses to travel upward and outward, reducing the dampening effect of the vegetation and terrain.
- c. Wire laid along trails is vulnerable to foot and vehicle traffic. Frequent rains and constant dampness affect the field wire range considerably. The range can be increased by installing two separate twisted pair wire lines as conductors for one circuit, or by using loading coils, repeaters, or special telephones. Because of the supply and transportation difficulties, light assault wire and light wire equipment are more suitable to jungle conditions. Security is provided for wire parties. Light aircraft are used to lay wire.
- d. Foot messengers are relied upon extensively. They frequently are sent in pairs to provide mutual protection against ambush. Pigeons and mes-

senger dogs are particularly suitable in jungle operations. Light aircraft may be used to carry messages. Transportation of equipment over great distances is more difficult.

123. DESERT OPERATIONS. Desert operations require the maximum use of radio. When practicable, however, the premature establishment of wire systems is avoided. The use of other means of communication is similar to that in normal terrain. When possible, messengers are mounted. Camouflage nets and concealment are used extensively to deceive enemy ground and aerial observation as to the command post locations. Wide dispersion of installations is necessary.

124. AMPHIBIOUS OPERATIONS. a. Amphibious operations require continuous planning until the operations are completed. The communication officer's orientation includes security measures for the operation, the objective, distances from the beach to the objective areas, the terrain, the landing craft to be used, and the equipment resupply plan. He bases his communication plan on this information. Specialized training precedes the embarkation. During this phase, all ground troops to participate in the landing are assembled. Communication personnel are trained with other regimental troops in using cargo nets, small landing craft, and in waterproofing equipment. Specialized communication training includes communication exercises and operation aboard landing craft and command ships. A rehearsal is conducted in which the entire landing force embarks

upon a training operation and lands on a beach similar to the actual objective.

- b. During the embarkation, a troop message center is established on shipboard before troop embarkation time. This message center expedites the transmission of messages between the regimental commander, lower unit commanders, other ground force commanders, and the transport communication center. Communication equipment is loaded so that it can be unloaded easily and quickly. The operating personnel hand carry some items of communication equipment.
- c. During the voyage, the men operating the transports or landing craft carry on the external or between-ship communication. Their principal means of communication includes blinkers and flags. They maintain radio silence until the landing is started or discovered. The platoon leader issues additional instructions pertaining to individual duties. Final plans for the assault communication system are completed during the voyage.
- d. During the landing, the communication platoon operates the regimental command post afloat and establishes the communication system ashore. The communication platoon's first echelon lands with the assault battalions. It establishes an advance message center and enters the regimental radio nets. Wire communication is established with the assault battalions, the shore party, and the supporting units according to the communication officer's plan. The regimental commander

decides when to open the command post ashore. After the command post is opened ashore, message center facilities and radio communication are operated afloat as long as necessary.

- e. When the regimental commander or his representatives go ashore, necessary communication personnel (including radio operators and messengers) accompany them. They use the facilities available at the advance message center and shore party. Radio nets are planned and coordinated in advance to provide continuous operation between the regimental command post afloat and ashore, assault battalions, the shore party, supporting and adjacent units, and division. The communication officer anticipates personnel and equipment losses in preparing his landing plan.
- f. After the landing, the regiment operates as in the approach march and the attack. Initially, radio is the primary means of communication until the wire system is installed. Wire is laid so as to prevent the circuits from becoming unserviceable because of vehicular activity in the beachhead area. All units use messengers. The leading assault elements use visual signals, particularly pyrotechnics, to indicate when the objectives and phase lines are reached and crossed. Marking panels are used to identify units and to mark front line positions to friendly aircraft. Sound signals may be used. During the consolidation phase of an amphibious operation, faulty or damaged equipment is repaired or replaced, casualties are replaced, and wire lines are shortened and serviced.

CHAPTER 4

INTELLIGENCE AND RECONNAISSANCE PLATOON

Section I. GENERAL

- 125. ORGANIZATION. The intelligence and reconnaissance platoon consists of a platoon headquarters and three reconnaissance squads.
- a. The platoon headquarters consists of a platoon leader, a platoon sergeant, truck drivers, radio operators, and scout-observers.
- **b.** Each reconnaissance squad consists of a squad leader, an assistant squad leader, a radio operator, truck drivers, and scout-observers.

126. DUTIES OF PERSONNEL. a. Platoon headquarters.

- (1) The platoon leader commands the intelligence and reconnaissance platoon. He is responsible for his platoon's administration, training, discipline, and operation.
- (2) The platoon sergeant is second in command. He assists the platoon leader in training the platoon and in directing the intelligence and reconnaissance opera-

- tions. He replaces the platoon leader during his absence.
- (3) Radiotelephone operators operate the radio sets in the platoon headquarters. They are trained to operate in the platoon and the regimental command nets, and they maintain contact with the division reconnaissance company and other units, when appropriate.
- (4) Truck drivers operate the platoon headquarters transportation and perform driver maintenance. One vehicle is equipped with a .50 caliber machine gun for antiaircraft and ground security. Platoon headquarters drivers are trained to operate this weapon. Drivers also are trained as riflemen and scout-observers.
- (5) Scout-observers of platoon headquarters reconnoiter, patrol, and man observation posts. They also are trained as riflemen.

b. Reconnaissance squad.

- (1) The squad leader commands the squad, and is responsible to the platoon leader for its training, discipline, and operation.
- (2) The assistant squad leader is second in command. When part of the squad is operating separately, he assists the squad leader, and commands a detachment. He replaces the squad leader during his absence.
- (3) The radiotelephone operator operates the squad radios in the platoon net, com-

- municating in a regimental net and with the division reconnaissance company and other units when appropriate.
- (4) Truck drivers operate the squad transportation and perform driver maintenance. They also are trained as scoutobservers and as riflemen.
- (5) Scout-observers operate under the squad leader or the assistant squad leader on reconnaissance patrols, either motorized or on foot. They man the observation posts, or accompany the patrols as trained intelligence and reconnaissance personnel. They also are trained as riflemen.
- 127. EQUIPMENT AND MAINTENANCE. a. Motor transportation is adequate to motorize the platoon completely. Each squad, with its three vehicles, operates as a motorized patrol. Transportation is provided in platoon headquarters so that an additional motorized patrol can be organized.
- **b.** Armament of the platoon includes rifles, carbines, submachine guns, and a caliber .50 machine gun. Squad leaders, assistant squad leaders, and scout-observers are armed with rifles. Drivers are armed with submachine guns. The officer and other men, except drivers, are armed with carbines.
- c. Communication is usually by radio or messenger. The platoon is equipped with radios for communication between platoon headquarters, squads, regimental headquarters, and other units which have similar radios (fig. 29). The dis-

mounted patrols and observers use the portable sets. When possible, the platoon headquarters and the squads use these sets instead of the long range amplitude-modulated sets.

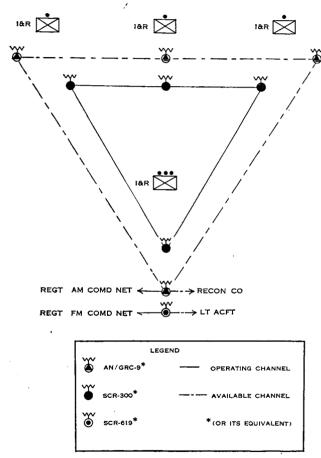


Figure 29. Typical radio nets of the intelligence and reconnaissance platoon.

- d. Maintenance in the platoon is limited to the individual care of equipment. For maintenance of communication equipment, see chapter 3. For maintenance of other equipment, see chapter 1 and FM 7-30.
- 128. EXPLANATION OF TERMS. a. Military intelligence is evaluated and interpreted information concerning an actual or possible enemy or area of operations (including weather and terrain), with conclusions resulting from this information. It includes estimated enemy capabilities or possible enemy courses of action that can affect the accomplishment of our mission. Military intelligence comprises the broad fields of strategic intelligence, combat intelligence, and counterintelligence. There is no rigid distinction between these classes of intelligence. Much strategic intelligence is also combat intelligence, and counterintelligence is an important element of the other two classes.
 - b. Combat intelligence deals principally with the situation and capabilities of the enemy armed forces, and with the area of operations. It is produced only in wartime. It is based upon information of the terrain, weather, location, disposition, composition, armament, equipment, supply, movement, training, discipline, and morale of the enemy formations capable of opposing friendly forces in a theater of operations. Its purpose is to reduce, as far as possible, any uncertainty in connection with the enemy and other factors which might influence the outcome of the operations.
 - c. Essential Elements of Information (EEI) are

the additional information of the enemy, of weather, and of terrain, which the commander needs in order to make a sound decision, formulate a plan, conduct a maneuver, or avoid surprise. In effect, the EEI are the commander's current, high-priority-intelligence requirements. The EEI also may include requirements for information or intelligence based on requests from higher, lower, or adjacent units. EEI for each operation are stated in the form of questions in paragraph 3x of operation orders, and in paragraph 2 of the intelligence annex of operation orders. Additional EEI may be announced separately at any time, when required by a changing situation.

- d. Information includes all observations, documents, facts, matériel, diagrams, maps, or reports of any kind about either an enemy, possible or actual, or a theater of operations.
- e. Reconnaissance and observation are the directed, organized processes of searching for information in the field. Reconnaissance usually includes movement. Observation includes searching for information from stationary positions.
- f. Battle reconnaissance is reconnaissance directly connected with tactical operations and made before, during, and after combat. It supplies most of the information for the production of combat intelligence.
- g. Close reconnaissance is that part of battle reconnaissance that is conducted while the opposing forces are in or near actual contact.
- h. Reconnaissance by fire is the process of firing upon a suspected enemy location with the purpose

of forcing the enemy to disclose his presence or exact location.

- i. Route reconnaissance is reconnaissance along a specific route to determine its value for military purposes.
- j. Axis of reconnaissance is a series of intermediate reconnaissance points along a general route. A commander who is assigned an axis of reconnaissance has more flexibility of decision as to his specific route than a commander who is assigned a route reconnaissance.
- k. Counterintelligence consists of measures to deny information of friendly forces to the enemy, and neutralize enemy attempts to produce intelligence. Counterintelligence activities include counterpropaganda, censorship, secrecy, discipline, concealment, deception, precautions in handling information and documents, counterreconnaissance precautions in the movement of troops and individuals, communication security, regulation and supervision of the press, radio, and visitors.
- I. Security includes all measures for protection against observation, annoyance, interference, and surprise by enemy air, ground or naval units, and for maintaining freedom of action.
- 129. SOURCES OF INFORMATION. Information is obtained from maps, aerial photographs, map substitutes, captured documents and equipment, enemy and neutral press and radio, inhabitants, repatriates, prisoners, deserters, air and ground reconnaissance and observation, warning systems, radio locating, counterfire and counterbattery op-

erations, and from troops in contact with the enemy. For counterfire operations, see chapter 2.

- a. Individuals, squad and platoon leaders, and company commanders study the terrain and observe enemy activities. Patrols, scouts, and observers are used continuously while in contact with the enemy and when contact is imminent. Observers with units occupying forward areas provide information of the terrain, of the enemy, and of the progress of friendly units. Specific reconnaissance missions are assigned to patrols and observers whenever the type of information desired can be anticipated. Company commanders in battalions send pertinent information and all prisoners, captured documents, and enemy material to the battalion. See FM's 7-10, 7-15, and 7-37.
- b. The battalion commander also studies the terrain and observes enemy activities. He obtains information from higher, lower, and adjacent units, from patrols, and from intelligence personnel of the battalion headquarters company. During planning periods, he may assign specific reconnaissance missions to his staff. He forwards pertinent information and all prisoners, captured documents, and enemy material to the regiment. See FM 7-20.
- c. Attached intelligence units may include counterintelligence corps (CIC) detachments, interrogation of prisoner of war (IPW) specialists, translator teams, photo interpreter specialists, and other military intelligence service (MIS) organizations.

- d. Other units provide additional information. These units include artillery, armored, antiaircraft, combat engineers, chemical, medical, military government and civil affairs teams, technical intelligence teams, navy fleet units during amphibious operations, light aircraft, and cooperating tactical aircraft.
- e. The division reconnaissance company provides information through the division; or direct, when arrangements for communication are made in advance.
- f. The intelligence and reconnaissance platoon maintains contact with the security forces (covering forces), provides patrols, provides personnel to accompany other units, and mans the regimental observation posts. Information is collected and reported to the regimental S-2.
- 130. PRINCIPLES OF RECONNAISSANCE. Reconnaissance influences the outcome of every military operation. A commander needs information of the terrain and the enemy's location, strength, composition, disposition, activity, and condition. To make the most effective uses of the reconnaissance agencies at his disposal to get this information, he makes his reconnaissance plans in advance.
- a. The following principles govern reconnaissance planning:
 - (1) Reconnaissance is started as soon as practicable and continued throughout an operation.
 - (2) Missions assigned to reconnaissance

- agencies are consistent with their capabilities and limitations.
- (3) The minimum number of reconnaissance agencies and personnel are used to perform the mission.
- (4) Reconnaissance is coordinated to give complete area coverage without duplication of missions or conflict between friendly units.
- (5) Reconnaissance agencies are given specific instructions. They are told exactly what is wanted, where it may be found, when the mission is to be executed, and where and to whom to report.
- (6) Reconnaisssance elements are given enough freedom of movement to accomplish their mission.
- (7) As contact with the enemy becomes more probable, reconnaissance increases in intensity.
- (8) Contact is gained as soon as possible, and is maintained continuously after it is established.
- (9) Information of the enemy's main body and his reserves is sought.
- **b.** The following principles govern the conduct of reconnaissance agencies:
 - Elements of a reconnaissance patrol move by bounds within supporting distance of each other.
 - (2) Continuous all-around observation is maintained at all times.

- (3) When resistance is met, reconnaissance elements take cover, reconnoiter, and then act to accomplish their mission.
- (4) Reconnaissance elements engage in combat only when necessary to accomplish their assigned mission, or in self defense. They do not precipitate an engagement by disclosing their presence to the enemy unnecessarily. However, they sometimes must fight to get the information required by their mission.
- (5) Reconnaissance elements operate by infiltration and maneuver.
- (6) Information obtained by reconnaissance elements is reported in time to be of value.
- (7) Reconnaissance elements report all enemy information without delay.
- (8) Reconnaissance elements warn threatened units directly.
- 131. INTELLIGENCE TRAINING. a. During basic unit training the intelligence and reconnaissance platoon conducts squad and platoon training. It develops teamwork in collecting information. Because the men of this platoon must be especially proficient in individual day and night combat training, in patroling, and in observing, their training is begun early, during the advanced individual training phase. It is intensified during the basic unit training phase so that all men are proficient by the time they participate in unit field exercises, during advanced unit training. See FM 21–75.

- b. During advanced unit training, time is allotted to the intelligence and reconnaissance platoon leader for continued tactical training with the battalions and the regiment. Arrangements also are made during advanced unit training for the platoon to work with the division reconnaissance company. A suggested training schedule for advanced unit training is furnished in appendix II. Prior to this phase of training, the men of the intelligence and reconnaissance platoon are given individual day and night combat training, including patroling and observing, until they are proficient in operating alone and as members of a patrol or observation post.
- c. Leadership training, noncommissioned officer schools, and specialist training are continued under company or regimental control. Individual training subjects are re-emphasized. These include map and aerial photograph reading, day and night combat training and patroling, field messages, radiotelephone procedure, authentication and security, observation, range estimation, target designation, adjustment of fire, establishment and occupation of observation posts, use of cover and concealment, individual and small group feeding, camouflage, and identification of enemy formations, equipment, personnel, and weapons. Motorized and foot movement security on roads and across country are reviewed in squad and platoon exercises.

Section II. INTELLIGENCE TECHNIQUE

- 132. GENERAL. a. The regimental commander prescribes standing intelligence instructions as part of the SOP. These instructions serve as guides for intelligence activities throughout the regiment, and they include items of information to be sought, the priority of reports, the method of transmission, and the destination of reports. Systematic plans are made to obtain specific information. The regimental S-2 submits a list of the EEI for each operation to the commander for approval. He prepares orders and requests to units and other agencies for the commander. He assigns reconnaissance and observation missions to the intelligence and reconnaissance platoon based on its capabilities. He sees that each essential element of information is covered by an order or request to one or more agencies according to their capabilities. For the preparation of the collection plan see FM 30-5.
- b. The intelligence and reconnaissance platoon's principal job in the intelligence system is to collect information by reconnaissance and observation. The platoon is capable of high mobility, both on roads and across country. Its vehicular radio equipment permits the platoon to communicate by voice up to 20 miles, or by continuous wave for 30 miles. Each squad is capable of independent action.
- 133. RECONNAISSANCE METHODS. The intelligence and reconnaissance platoon patrols normally are

assigned reconnaissance missions. The use of these trained intelligence troops as combat patrols is wasteful. However, intelligence and reconnaissance platoon members may accompany combat patrols to obtain information required by the regimental commander. The intelligence and reconnaissance platoon reconnoiters on foot and by motor, both by day and night. Whether a patrol is mounted or dismounted depends on its mission, the terrain, and the enemy situation. A combination of mounted and dismounted patroling also may be used in accomplishing a reconnaissance mission. Several patrols operating at the same time are controlled by radio, visual signals, or by instructions regarding their movement. When several patrols are moving abreast, phase lines are designated for their coordination. Arrangements are made in advance for instant recognition between patrols.

- a. Day reconnaissance on foot is slower and more deliberate than motorized reconnaissance. Each reconnaissance squad may provide three foot patrols or three men each. Larger patrols are used over extended periods and greater distances. Small patrols sometimes are more effective where close contact exists with the enemy. The platoon also may provide men to accompany the patrols of other units.
 - Each patrol is examined thoroughly before departure. Each man is questioned to make sure that he knows his mission. Only necessary equipment is carried.

- Noisy equipment is padded or tightened to prevent noise. Nothing is carried which might provide information to the enemy. Arrangements are made for safe passage in friendly areas. Faces are darkened and shiny equipment is concealed or blackened. When necessary, individual or group rations are carried. Purified water or purification tablets are carried.
- (2) A patrol may follow a different route to and from its objective to avoid ambush. Patrols move by covered routes. They avoid hilltops and ridge lines except when observing. They approach each dominant terrain feature cautiously. They observe in all directions before crossing each crest. They avoid trails and well-used stream crossings. They move by routes where enemy positions are not likely to be encountered. They reconnoiter each likely enemy location. When reporting by radio, or when resting, a patrol selects a covered position near good observation in all directions. The men disperse for security. Observation is continuous. For additional information on dismounted reconnaissance, see FM 21-75.
- b. Motorized day reconnaissance is more rapid and less deliberate than reconnaissance on foot. Each reconnaissance squad is a three-vehicle motorized patrol. The vehicles move by bounds and are separated by safe distances to avoid am-

preferable to short cuts in the open (fig. 31). The squad leader rides in the second vehicle. He uses arm-and-hand signals to control his patrol. The men in the leading vehicle periodically dismount under cover or concealment and observe before proceeding. Ridge lines are passed with caution (fig. 32). When leaving concealment, such as at the edge of a woods, the vehicles are stopped under cover while the men from the leading vehicle observe to the front and flanks. When enemy contact is probable, the mounted patrol moves by short bounds, and reconnoiters on foot between bounds. Each vehicle covers the vehicle ahead and behind. Visual contact is maintained between the vehicles. The men from the leading vehicle reconnoiter dangerous areas, before the remainder of the squad advances. Covered routes are used. Exposed roads, trails, and much-used stream crossings are avoided by vehicles, but are reconnoitered on foot. Close terrain is investigated by dismounted patroling (fig. 33). The vehicles spread out immediately after clearing a defile (fig. 34). During halts, the vehicles are dispersed under cover and faced for a quick getaway (fig. 35). Observers are posted at a distance to provide timely warning. One observer acts as an air observer. When enemy aircraft approach, the vehicles disperse and take cover. The patrols seldom fire on aircraft. A motorized patrol may leave a few men to maintain observation over enemy groups, while the remainder of the patrol bypasses the enemy. When the terrain or the enemy

bush. They travel across country whenever the terrain permits (fig. 30). Covered routes are



Figure 30. Vehicles travel across country whenever the terrain permits.

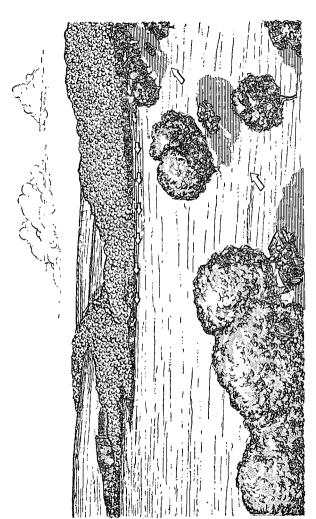


Figure 31. Covered routes are preferable to short cuts in the open.

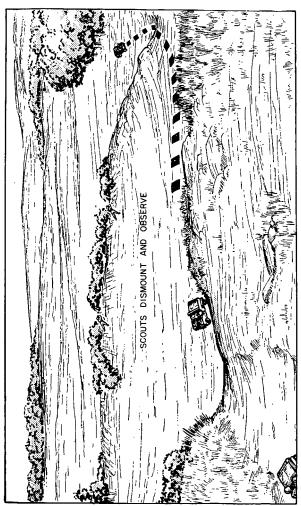


Figure 32. Ridge lines are passed with caution, taking advantage of defilade.

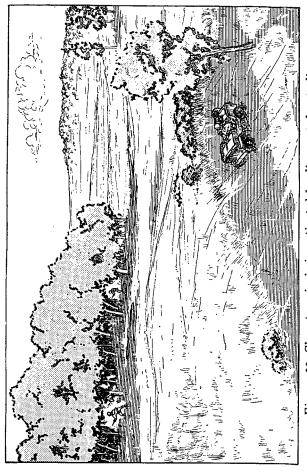


Figure 33. Close terrain is investigated by dismounted patroling.

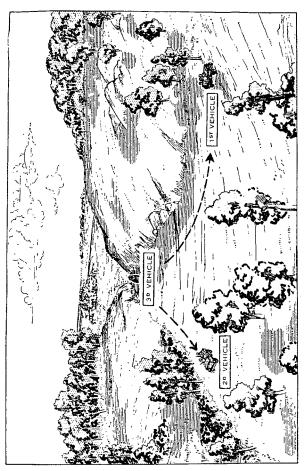


Figure 34. Vehicles spread out immediately after clearing a defile.

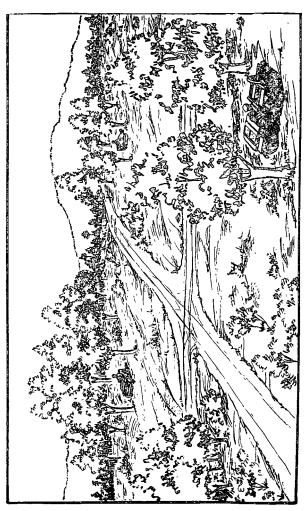


Figure 35. During halts, vehicles are dispersed under cover and faced for a quick getaway.

prevent continued motorized reconnaissance, a patrol leaves its vehicles and continues on foot. One driver may be left with each vehicle. Primary and alternate assembly points are designated. For additional information on motorized patroling, see FM 2-20.

c. Night reconnaissance requires patrols to move more cautiously. Lights seldom are used. When signal lights are used, signals are from front to rear. Vehicles are used at night only to cover great distances more rapidly, or when contact with the enemy is not likely. When moving across country at night, vehicles are not much faster than dismounted men. Roads are used when motorized reconnaissance is made at night. One or two men precede each vehicle on foot unless observation to the front is possible. Patrols on foot are very effective at night. When several patrols are used in the same area, their routes are coordinated to prevent confusion. Specific routes and objectives are assigned. Patrols may move to a concealed location at night, and observe during daylight. Night patrols avoid heavily wooded areas. They move in the open, but avoid crests and ridge lines except when observing or listening. Patrols move by short bounds, and 'stop to listen frequently. Thorough preparation of all patrol members for night reconnaissance is supervised by patrol leaders. See FM 21-75.

134. OBSERVATION POSTS. a. Observation posts are established at points that afford a commanding view of the terrain occupied by the enemy and

friendly units. Concealment from enemy observation and communication with friendly units is provided. For the selection and construction of observation posts, see FM 30-10.

- b. Equipment needed in an observation post includes a compass or aiming circle, a telescope or field glasses, a watch, a map, and material for recording observations. A large scale map or photomap of the surrounding area and material for constructing range cards, and making sketches is desirable. In the defense, more elaborate equipment such as range finders, periscopes, and plotting boards are provided. Telephones and portable radios are used for communication with the platoon leader and a battalion or regimental command post.
- c. Precautions are taken to insure secrecy. Persons visiting the observation post approach and leave under cover. They use different routes for entering and leaving. They avoid making trails which converge at the observation post. The number of visitors at an observation post at any one time is limited. Fires, smoke, lights, and noise are prohibited. Objects which reflect light or which contrast with the background are removed or concealed. When natural concealment is inadequate, the observation post is camouflaged. Alternate locations are selected. An alternate observation post is occupied when the primary observation post is discovered, or is ineffective because of enemy fire or other activity.
- d. An observer, a recorder, and a messenger usually are required to operate the observation

post. Duties are rotated to provide rest for each man. The observer determines the exact location of the observation post. He finds its location on a map, and reports map references to the squad or platoon leader. He selects prominent landmarks as reference points. He measures azimuths and estimates ranges to these reference points. He identifies these points on a map and plots them on a range card. The observer watches and reports to the recorder all enemy activity in his sector of observation. The recorder enters observations on report forms, on the map or on a sketch or overlay. He records the time and place of each observation. Significant information is reported to the command post by telephone, radio, or messenger, immediately. A copy of the observer's log is sent periodically to the command post, and a copy of this report is retained in the observation post.

135. OBSERVER AND RECONNAISSANCE REPORTS. a.

Reports are submitted by telephone, radio, messenger, or prearranged visual signals. When patrols or observation posts are used over great distances, or beyond difficult terrain, light aircraft can be used to pick up and deliver messages, or to relay radio messages. Intelligence and reconnaissance platoon personnel in front line observation posts use existing wire nets or a wire line laid by the regimental communication platoon. The platoon leader determines the method and frequency of reporting. He also instructs the patrols and observers concerning emergency mes-

sages (messages containing information of immediate importance). They are submitted immediately by the fastest available means of communication.

- **b.** Information of a routine nature is reported periodically. Reports are written or oral. Written reports are preferable for clarity and future reference (figs. 36, 37, and 38). When practicable, oral reports are confirmed by subsequent written messages. When time permits, sketches and overlays are prepared. They are used to clarify the information contained in reports (fig. 39). The following information is included in reports:
 - Observation post, patrol number, or code name.
 - (2) The report serial number.
 - (3) Range and azimuth to each location given in the report.
 - (4) Description of each observation.
 - (5) Date time or duration of each activity or event.
 - (6) An overlay or sketch to clarify the information, when appropriate.
 - (7) Route and terrain information and the condition of the patrol or observation post.

COMBAT REPORT

ISR Flat LITINF (ORGANIZATION)

1000 L Dec 49

1 WHERE ARE YOU?	1 WHERE IS THE ENEMY?
ANDREWS HILL 98418574	WEEKS HILL 97858645
2 WHAT ARE YOU DOING?	2 WHAT IS HE DOING?
Observing	Preparing defenses
3 WHO IS ON YOUR RIGHT?	3 WHAT WEAPONS IS HE USING AGAINST
"A" Co. 15TINF	most & arty
4 WHO IS ON YOUR LEFT?	4 WHAT ENEMY UNIT HAVE YOU IDENTIFIED?
"L" Co. 2ª INF	none
5 HOW MANY CASUALTIES HAVE YOU?	5 WHAT PRISONERS OR DOCUMENTS HAVE YOU CAPTURED? I PW
1 WIA	WHERE ? 98148598 WHEN? \$95\$
	DISPOSITION? Evacuated to Regt

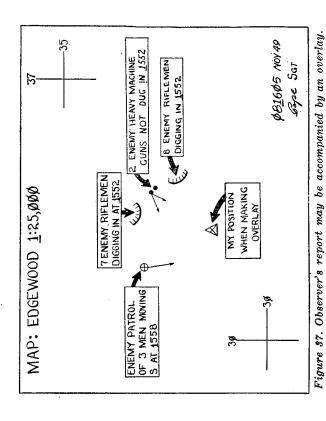
REMARKS:

(NAME)
Sgt.
(GRADE)

INSTRUCTIONS

- REPORTS ARE SUBMITTED AT HOURS AND FOR PERIODS AS DIRECTED BY THE NEXT HIGHER COMMANDER.
- GIVE KNOWN FACTS ONLY WHEN ANSWERING QUESTIONS. OPINIONS MAY BE INCLUDED IN REMARKS BUT MUST BE STATED AS SUCH.
- 3. NEGATIVE INFORMATION IS IMPORTANT.
- 4. THIS REPORT, WHEN NECESSARY, MAY BE ACCOMPANIED BY A MAP OR A SKETCH.
- ALL QUESTIONS ARE ANSWERED IF POSSIBLE, TO INSURE THAT NO POINT IS OVERLOOKED. IF A QUESTION CANNOT BE ANSWERED, DRAW A LINE THROUGH THE SPACE PROVIDED.

Pigure 36. Suggested form for combat report.



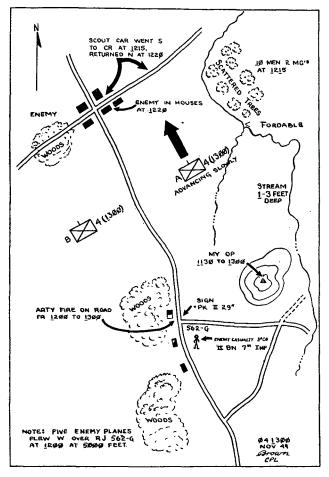


Figure 38. Observer's report may be accompanied by a sketch if a map is not available to make an overlay.

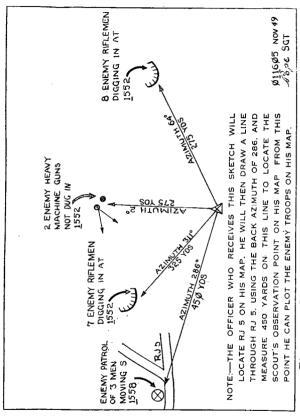


Figure 39. If each observation cannot be located on an overlay or sketch, the range to it is estimated and the azimuth measured.

c. The patrol leader or the interrogation officer should make the final, written report depending upon the situation and the available time. Patrol reports are prepared in the following form:

PATROL REPORT

RED-3 13 January 1950

DATE

DESIGNATION OF PATROL

CO. 14th Infantry Regiment

MAP (AIR PHOTO) REFERENCES:

FRANCE and BELGIUM, 1:500,-000, CALAIS.

Sheet 38

OT:

- 1. SIZE AND COMPOSITION OF PATROL: 5 EM
- 2. MISSION: Proceed to railroad bridge at 749615 and determine if area is mined, condition of bridge, and if bridge is wired for explosives.
- 3. TIMES AND ROUTES:
- a. Time of departure

103930 January

b. Time of return

132114 January

c. Routes (out and back) followed south bank of railroad.

4. INFORMATION GAINED:

- a. Terrain:
 - (Description of the terrain—dry, swampy, jungles, thickly wooded, high brush, rocky, deepness of ravines and draws; condition of bridges as to type, size, strength; affect on armor and wheeled vehicles.)

Generally hilly, area near bridge cut by deep ravines 4 to 15 feet deep, no water. Railroad OK, clear except for road block 50 yards from

bridge. Bridge made of steel and appeared to be in good condition. Through binoculars numerous wires could be seen running along sides of bridge. Bridge believed to be prepared for demolition.

b. Enemy:

- (Strength, disposition, condition of defenses, equipment, weapons, attitude, morale, exact location, movements and any shift in dispositions.)
- 8 En seen in positions near E end of bridge at least 4 En on other side. One AT gun and one MG in position near bridge on west side covering road block. En moved about freely and position seemed to be disorganized.
 - (1) Time activity was observed

1310 to 1500.

- (2) Map coordinates where activity occurred 749615.
- c. Any Map Corrections: None
- d. Miscellaneous Information:

Passed farm buildings at 738612 which appeared to be vacant.

5. RESULTS OF ANY ENCOUNTERS WITH ENEMY:

- a. Prisoners and dispositions: None
- b. Identification: None
- c. Enemy casualties: None
- $\emph{d}.$ Captured documents and equipment: None
- 6. CONDITION OF THE PATROL, INCLUDING DIS-POSITION OF ANY DEAD OR WOUNDED:

No casualties.

7. CONCLUSIONS AND RECOMMENDATIONS:

(Including to what extent the mission was accomplished and recommendations as to patrol equipment and tactics.)

Patrol too large-same mission could have been accomplished with 3 men with less chance of being detected.

/s/ J. A. SMITH, Sgt., I & R Plat. 132200 January Signature, Grade, and Organization of Patrol Leader Time

8. ADDITIONAL QUESTIONS OR REMARKS BY INTERROGATOR:

Patrol leader states that road block consisted of two fairly large boulders on railroad tracks. That vehicles could not bypass these boulders. That bridge could be used by vehicles, but might need planking. Patrol report verifies activity previously reported by air OP on 121300 Jan.

/s/ R. B. JONES, 1st Lt. 14th Inf. 132300 Jan
Signature, Grade, and Organization of Interrogator Time

Note. All entries in this report would be in long hand.

136. EXAMINATION OF PRISONERS AND CIVILIANS.

Intelligence and reconnaissance platoon personnel may be used to help the regimental S-2 examine prisoners and civilians. This job exists when prisoners are numerous and reconnaissance missions do not occupy the entire platoon. The regimental S-2 supervises the questioning of selected persons for items of immediate tactical importance to the regiment. He examines only those persons who are likely to have information of value, such as officers, noncommissioned officers, messengers, and prominent local citizens. When prisoner of war interrogation teams are attached to the regiment, these trained personnel conduct a more thorough interrogation of the prisoners. FM 30-15 gives the methods of examining enemy personnel, documents, and materiel. For the collection and evacuation of prisoners of war, see FM 100-10. For the rights, privileges, and treatment of prisoners of war, see FM 27-10.

Section III. TACTICAL EMPLOYMENT

- 137. GENERAL. The intelligence and reconnaissance platoon is the regiment's combat intelligence agency. It collects information under the regimental S-2's supervision as the regimental commander directs. It operates under the platoon leader's immediate control. It may be assigned one or more of the following missions:
- a. Preceding the advance guard during marches.
- **b.** Providing connecting groups for the regiment on the march, when its squads are not needed for intelligence, reconnaissance, or observation missions.
- **c.** Obtaining enemy and terrain information in areas and situations requiring trained intelligence personnel.
- d. Locating and maintaining contact with the enemy when the regiment is not protected by covering forces.
 - e. Investigating areas for enemy information.
- f. Maintaining contact with elements of the division reconnaissance company, and other covering forces operating to the front or flanks.
- g. Establishing and maintaining contact with adjacent friendly units.
- h. Establishing and occupying observation posts.

- i. Providing trained intelligence and reconnaissance personnel to accompany patrols of other units.
- which the intelligence and reconnaissance platoon precedes the regiment depends upon whether the movement to contact is protected by covering forces. Before contact is made with the enemy, the intelligence and reconnaissance platoon patrols beyond the range of ground observation to the front and flanks. As enemy resistance is developed, the platoon reconnoiters areas which may be held by the enemy to the front or flanks. Elements of the intelligence and reconnaissance platoon may be attached to a flank security detachment or to the advanced guard.
- a. During route column, the platoon precedes the regiment along the march route. It obtains route information, which includes condition of roads, bridges, fords, ferries, railroad crossings, bivouac sites, facilities for water, concealment from air observation, location of defiles, routes through towns, and the attitude of the civil population. When the regiment moves by one route, the intelligence and reconnaissance platoon operates as a unit under the platoon leader. When the regiment moves by more than one route, each intelligence and reconnaissance squad may move along a different route. The squads either operate under platoon control, or under each regimental column commander's control. The platoon leader either accompanies a squad patrol, or moves with the regimental command post.

- **b.** During tactical column, the platoon reconnoiters to the front and flanks. Each squad obtains information of the enemy and the terrain. Elements of the platoon operating to the front may maintain contact with the covering forces. Platoon elements operating to the flanks may maintain contact with adjacent friendly units. Motorized patrols also may be used to maintain contact between units of the column. As each town, defile, or other critical area is passed through, the platoon makes a detailed investigation to insure the regiment's security, and to obtain specific information. When the regiment is protected by adequate covering forces, the platoon's actions may be limited to terrain reconnaisssance and maintaining contact. The platoon leader arranges for communication with the division reconnaissance company or other covering forces. When the regiment is not protected by adequate covering forces, the platoon may be attached to the advance guard.
- c. During the approach march, the intelligence and reconnaissance platoon operates on a broad front along several routes. All or part of the platoon may be attached to the advance guard. It obtains timely information of the terrain and enemy. It maintains contact with friendly forces and adjacent units. When it encounters the enemy, the platoon reconnoiters aggressively. It determines the enemy's location, disposition, strength, depth, his capabilities, apparent mission, and volume of fire power. This information is reported immediately to the platoon leader. One patrol may

dismount and reconnoiter the immediate enemy force. Other patrols continue around the enemy and seek out the enemy in depth or on the flanks.

139. ATTACK. The intelligence and reconnaissance platoon reconnoiters within the regimental zone. During the planning for a coordinated attack, it starts early intensive reconnaissance, patroling, and observation. It obtains specific information desired by the regimental commander to assist him in making decisions and plans. The platoon establishes observation posts and sends patrols to specific objectives in the enemy area. Platoon elements also may be used to maintain contact between friendly units during the attack. One or more squads may accompany a battalion making an envelopment. A squad may also accompany each leading battalion. Squads maintain communication with the platoon leader, or with the regimental command post. Information is reported to the battalion with which a reconnaissance squad is operating, and also to the platoon leader or to the regimental S-2. When all platoon members are not required on reconnaissance missions, selected men may assist the S-2 in the command post.

140. REORGANIZATION. When the regiment reorganizes, the intelligence and reconnaissance platoon may be used to reconnoiter to the front and flanks. It may establish observation posts to cover enemy positions and routes. It gives timely warning of enemy counterattacks, or timely in-

formation of enemy withdrawals. Visual contact with the enemy is maintained continuously. Any enemy activity is reported immediately by the most expeditious means.

- 141. PURSUIT. The intelligence and reconnaissance platoon maintains contact with the fleeing enemy force during a pursuit. It reconnoiters routes. either along the axis of pursuit or around an enemy flank. Elements of the platoon also may be attached to an encircling force. The platoon seeks to recognize immediately any enemy attempt to attack or delay the regiment. It reconnoiters enemy delaying positions to locate their flanks and determine their extent in depth. It provides the regimental commander with information of routes by which delaying positions can be attacked or by-passed. The squads operate as motorized patrols and investigate defiles for road blocks. mines, and persistent chemicals. When obstacles such as rivers are found the patrols promptly intensify their reconnaissance to discover routes past the obstacles. They are cautious not to cause the enemy to destroy bridges or block defiles before they can be secured by friendly forces.
- 142. **DEFENSE.** a. The intelligence and reconnaissance platoon obtains early information of the terrain and of the enemy's strength, disposition, and movement. Platoon operations are characterized by close cooperation with friendly security forces, by intensive reconnaissance and patroling, and by occupation of observation posts from which the enemy can be kept under surveillance.

- b. When a defense is organized out of contact with the enemy, the platoon obtains terrain information to supplement the personal reconnaissance of the regimental commander and the S-2. It seeks information of approaches into the regimental sector.
- c. When a defense is organized in contact with the enemy, the platoon reconnoiters and observes for information of enemy strength, movements, and the disposition of troops and weapons. Organic radio equipment permits long range communication within the platoon. Normally, elements of the platoon do not reconnoiter more than 600 yards forward or to the flanks when the regiment is on the main line of resistance. When the regiment is operating separately, on an exposed flank, or as the general outpost, the platoon operates over greater distances. Even then the platoon usually is not used more than 3 to 5 miles from other regimental units, because of its reduced tactical effectiveness when separated from other infantry units. Specific missions assigned to the platoon include one or more of the following:
 - (1) During the movement into the battle position, the platoon reconnoiters routes for units of the regiment. Each reconnaissance squad may operate independently so that more than one possible route is reconnoitered at the same time.
 - (2) During the organization of the position, the platoon maintains contact with security forces and establishes observa-

tion posts. Communication is established with the division reconnaissance company, with those elements of the general outpost in the assigned zone, with the combat outpost, and with aircraft, when practicable. To cover his assigned zone of responsibility, the platoon leader coordinates the movement of the three reconnaissance squads.

- (3) During the enemy approach, the platoon provides security from surprise by motorized patroling forward of the combat outpost or on an exposed flank. After withdrawal of the general outpost, elements of the platoon continue to patrol. This keeps the enemy under observation until he reaches the combat outpost or the battle position.
- (4) During the defense, the platoon provides patrols or trained intelligence personnel to accompany patrols and security forces. To obtain specific information as required by the regimental S-2, one or more of the platoon members frequently are attached to the combat outpost, or to a patrol. Whenever the platoon sends out independent patrols the regimental S-2 coordinates these patrols with the battalion patrols (fig. 40).
- d. The platoon may establish and occupy observation posts within the battalion position, on an exposed flank, or forward of the main line of resistance. Each squad is capable of manning two

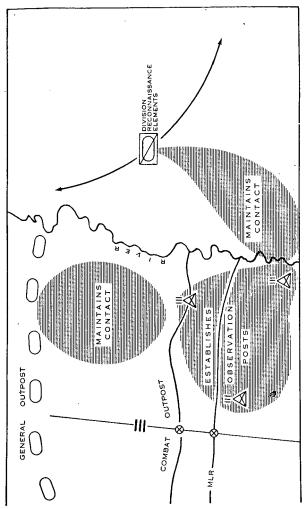


Figure 40. Typical missions of the intelligence and reconnaissance platoon in defense.

observation posts. Communication is maintained between these observation posts and the platoon leader or the regimental S-2. Each observation post is dug in and concealed from enemy air and ground observation. When forced to withdraw to avoid capture, the observation posts are reestablished as soon as possible.

- e. When the regiment is part of the general reserve, the platoon may execute reconnaissance missions. It patrols approaches to assembly areas and screens the movement of reserves.
- f. The platoon may participate in the regimental air warning and antitank warning plans. Organic platoon communication is coordinated with regimental wire and radio nets for transmission of flash messages.
- g. When not required for reconnaissance or observation missions, the platoon may provide men at the command post to assist the regimental S-2.
- 143. WITHDRAWALS. Elements of the intelligence and reconnaissance platoon may be used to reconnoiter the new position and the routes to it. After the withdrawal begins, elements of the platoon maintain contact with the enemy by patroling. The platoon elements also reconnoiter to the flanks, and maintain contact between friendly units (fig. 41).
- a. In a daylight withdrawal, the platoon operates with the regimental covering force or between it and the enemy. It establishes observation posts from which it can observe the movement

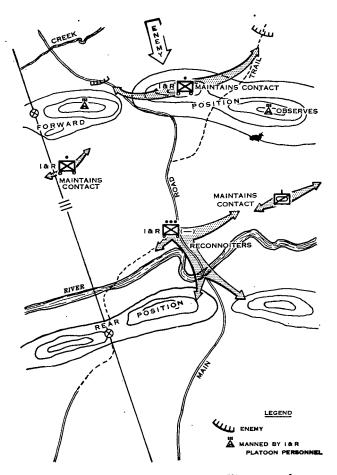


Figure 41. Typical missions of the intelligence and reconnaissance platoon in retrograde movements.

of the enemy's leading units. Patrols maintain contact with the enemy before his arrival in front of the covering force. Patrols report enemy activity to the covering force commander and to the regimental S-2. When the covering force withdraws, the platoon operates in front of the new battle position to get timely information on the movement of the enemy's leading units.

b. In a *night withdrawal*, the platoon establishes listening posts, provides men for reconnaissance patrols, and maintains contact with the enemy in front of the covering force and on the flanks. The reconnaissance of the new position and the reconnaissance of routes to the rear is made during daylight and is more deliberate than in a daylight withdrawal.

144. DELAYING ACTION. a. In delaying action frontages are greater and distances between units are more extensive than in positions for sustained defense, and units withdraw before the enemy can engage them in close combat. In a delaying action on one position, the intelligence and reconnaissance platoon is used as in a sustained defense. Reconnaissance patrols and observation posts warn of the enemy approach. They provide information for the use of friendly long-range supporting fires.

b. In a delaying action on successive positions, the platoon combines the missions normally performed in the defense and withdrawals (fig. 41). A delaying action on successive positions is characterized by great extension of friendly forces

and little depth. As the units withdraw from one delaying position to another, the platoon maintains contact between the friendly units and with the enemy. Connecting patrols are used between parallel columns. Observation posts are occupied where the enemy can be observed as he passes through defiles. Flank patrols give timely warning of any enemy attempt to encircle or to block the delaying force's withdrawal.

- c. The platoon operates in an offensive delaying action the same way as in attack and reorganization.
- 145. RETIREMENT. In a retirement from contact, the intelligence and reconnaissance platoon maintains observation over the enemy from the beginning of the withdrawal until contact with the enemy has been broken. When the enemy attempts to pursue, the elements of the platoon maintain contact with the leading enemy units. This is done by attaching the platoon elements to the covering forces. Initially the platoon operates as in withdrawals. Observation to the flanks is intensified to discover any enemy attempt to encircle the regiment. After breaking contact with the enemy the platoon is used in the same manner as in tactical column.
- 146. RELIEF IN CONTACT. During the preparation for a relief, the intelligence and reconnaissance platoon leader of the relieving unit contacts the intelligence and reconnaissance platoon leader of the regiment being relieved. At this time he obtains the patrol plan of the regiment being relieved,

and makes a reconnaissance of the observation posts in the new area. He advises the headquarters company commander concerning the men to be detached to battalions. He arranges for guides to conduct observers to their stations. He sees that his men do not possess anything which would warn the enemy of the impending relief if they are captured. When he is ready to assume the responsibility for the patrol, observation, and security missions assigned to his platoon, he notifies the regimental S-2 and the platoon leader being relieved.

- 147. AIRBORNE OPERATIONS. a. The intelligence and reconnaissance platoon of the airborne infantry regiment may arrive in the airhead with its tactical transportation on an early airborne echelon. The tactical transportation is required so that the platoon can accomplish its normal ground mission by foot and motorized reconnaissance. It usually arrives with the assault echelon. Its transportation is either delivered by parachute, by glider, or air landed later.
- **b.** The platoon's initial missions are assigned before the airborne attack is launched. Because of the limited friendly ground reconnaissance before the assault, the platoon's initial missions may be more extensive than in other ground situations.
- 148. ANTIAIRBORNE DEFENSE. The intelligence and reconnaissance platoon assists the regimental commander in obtaining information of the assigned area for the defense. This information

includes the location of likely landing areas, natural obstacles, suitable routes for enemy movement, areas for enemy assembly and reorganization, the location of and routes to likely enemy objectives from landing areas, and routes for movement of friendly mobile striking forces. After plans are completed the platoon establishes observation posts overlooking likely landing areas and routes toward enemy objectives. After the landings are made, the platoon maintains contact with the enemy and keeps him under surveillance. Observers and patrols report the strength, the location, the progress, and the movement of enemy airborne forces, and the progress of friendly forces.

149. SPECIAL OPERATIONS—ATTACK OF A FORTI-FIED LOCALITY. During the attack of a fortified locality the platoon conducts reconnaissance patrols. These patrols seek detailed information of enemy obstacles, mine fields, dispositions, and fortifications.

150. SPECIAL OPERATIONS—OPERATIONS AT RIVER LINES. In defense of a river line the platoon may establish and occupy observation posts on both the near and far banks. In the attack of a river line, the platoon gathers information concerning approach routes to the river, crossing sites, the river's width, depth, and rate of flow, and enemy security forces on both banks. Elements of the platoon cross the river on a wide front. They patrol the far bank and establish observation posts overlooking enemy installations.

151. SPECIAL OPERATIONS-NIGHT OPERATIONS, a.

During night combat the intelligence and reconnaissance platoon patrols and establishes listening posts to secure information of enemy activity and weapons and to prevent the regiment from being surprised. Night reconnaissance is more deliberate than daylight reconnaissance. The night reconnaissance is planned carefully after a detailed map study. Where practicable, a reconnaissance or observation of routes is made in davlight. The platoon provides foot or motor patrols to reconnoiter routes across country and roads. Each patrol leader prepares a sketch showing the route to be followed, the road net, landmarks which can be recognized easily at night, compass bearings for major changes of direction, and distances from the initial point (IP) to prominent landmarks along the route. Definite means of identification and prearranged signals are established. Partially shielded colored flashlights and low audible signals may be used for identification and prearranged messages. Plans for control are simple and complete. Assembly points are designated in localities which can be readily found at night. Units move to successive objectives by bounds.

b. Dismounted patrols are small, consisting of a patrol leader, a getaway man, and two or more scout-observers. Distances covered at night usually are limited. Time required to accomplish a given mission usually is greater at night. Probability of capture is less when the correct technique is used. The patrol members stay closer

together at night than in daylight. They follow low, open terrain routes, avoiding thick growth and skylines except when these terrain features are to be investigated. The leaders check equipment before departure to make sure that it does not make noise.

c. Mounted patrols seldom are used at night in enemy terrain where contact with the enemy is close and active. When mounted patrols are used, they halt frequently and reconnoiter on foot. When operating in close terrain, dismounted men precede the vehicles. Halts are made where men and vehicles are not outlined against the sky. The security men are sent to the front and flanks so that the engine noises do not interfere with their hearing.

152. SPECIAL OPERATIONS—OPERATIONS IN BUILT-UP AREAS. During combat in towns the intelligence and reconnaissance platoon reconnoiters streets and buildings to the front and flanks. The patrols avoid becoming engaged in fire fights or in handto-hand fighting. When enemy centers of resistance or leading elements are discovered, they are kept under surveillance and their activities are reported to the units concerned. The patrols dismount and investigate each built-up area. Before entering a town or built-up area, the patrols observe the buildings and streets from outside the town. After entering the town, they use inconspicuous vantage points as observation posts. Steeples and other conspicuous points are avoided except when no other place can be found. The patrols move close to buildings, avoiding wide open streets where fields of fire are good. They investigate alleys, doors, windows, and high points where enemy observers might be located. They move in a staggered formation close to buildings. Intersections and other critical localities are designated as successive objectives. When vehicles follow a dismounted patrol through a town, they advance by bounds along routes which the patrol has reconnoitered.

OPERATIONS — OPERATIONS 153. SPECIAL **WOODS.** Combat in woods is characterized by limited observation and retarded movement. The intelligence and reconnaissance platoon relies on dismounted patrols for thorough coverage of thickly wooded areas. Fixed observation posts usually are limited to main trails and roads and the edge of open areas. Partols operate at closer ranges than in open terrain. Defiles are reconnoitered. One or more men may be left in a defile to discover any enemy activity that might threaten the regiment after friendly patrols have passed. Elèments of the platoon may be used to maintain contact along the route and with units on the flanks. The platoon can be used to develop enemy positions in detail, or to select areas where enemy elements may be ambushed.

154. SPECIAL OPERATIONS — MOUNTAIN OPERA-TIONS. Mountain operations rely extensively upon observation, dismounted patroling, and road control. The intelligence and reconnaissance platoon occupies observation posts and reconnoiters roads to the front and flanks. In the defense, where enemy observed and direct fire dictates the use of reverse slopes, the platoon provides trained observers to accompany security elements of front line units to crest positions ahead of the main force.

155. SPECIAL OPERATIONS—OPERATIONS IN SNOW AND EXTREME COLD. Operations in snow and extreme cold require that intelligence and reconnaissance platoon personnel be trained to use snowshoes, skis, and special vehicles. Direction is difficult to maintain. Landmarks are difficult to identify. Roads and trails often are concealed or nonexistent. Motorized patroling is limited. Foot, ski, and snowshoe patrols are more widely used. A combination of light oversnow vehicles and dismounted men may be used for distant patroling. Travel on skis under favorable conditions is rapid and silent, but tracks are easy to follow and may lead to ambush. The rate of travel on skis depends on the depth and type of snow, and the amount of vegetation. Under conditions of deep, soft snow, the trail snowshoe may provide a better way to travel. Patrols should take advantage of vegetation to conceal their tracks from aerial observation. Except for limitations on transportation and movement, the platoon tactics depend upon the type of operation, as in other terrain and weather conditions.

156. SPECIAL OPERATIONS—OPERATIONS AT DEFILES. Because of limited frontages and routes of move-

ment, combat at defiles limits the use of reconnaissance personnel. The platoon operates observation posts on high ground to the front and flanks. Because the natural barriers make contact with adjacent units difficult, the platoon may be used to maintain contact with other units on the flanks. Since troops in defiles are vulnerable to air and tank attacks, instructions to intelligence and reconnaissance personnel include adequate air and mechanized warning plans.

157. SPECIAL OPERATIONS - JUNGLE OPERATIONS.

In jungle operations the platoon may be confined to relatively small areas. Dense jungle growth and restricted observation limits the platoon to close reconnaissance. The jungle favors surprise and ambush by small forces. To avoid isolation behind enemy positions and conflict with adjacent friendly patrols, raids and reconnaissance patrols are assigned limited objectives.

158. SPECIAL OPERATIONS—DESERT OPERATIONS. In desert operations missions are assigned the intelligence and reconnaissance platoon to take advantage of its mobility. The platoon operates over wide frontages across country. Motorized patrols are sent out on distant reconnaissance missions. Radio and visual signals are used for coordination between patrols. Observation may be good for extreme distances. However, patrols obtain concealment by following low areas between hills and sand dunes. Men dismount frequently and move on foot to dominant terrain features to observe

the surrounding area. Observation posts, during daylight, and listening posts, at night, operate far in front and to the flanks of the regiment. Enemy movement often is rapid. All means of communication are used to guarantee timely warning of enemy activity. When radio silence is necessary, the patrols may lay wire lines across country to distant observation posts. Concealment from air observation is difficult. Tracks in the desert sand are informative and easily observed from the air. Vehicles use traveled routes for speed and to avoid being tracked. The patrols frequently start out under the concealment of darkness so as to reach their objective at daybreak. These patrols may observe and report from a stationary position during daylight, and return at night.

159. SPECIAL OPERATIONS - AMPHIBIOUS OPERA-TIONS. Amphibious operations are similar to any other attack after the establishment of initial beachheads. During early phases, these operations present special intelligence and reconnaissance problems. Personnel of the intelligence and reconnaissance platoon may be landed from several hours to several days before the assault echelons reach the objective area. Scouting parties land during darkness and reconnoiter routes inland from the beachhead area. These parties later assist in designating landing beaches for assault units. Assembly points are designated for these patrols to meet the friendly forces after the main landing begins. Naval fire control units and friendly air forces are notified of the areas in

which these patrols are operating. After the beachhead is established, the bulk of the platoon reconnoiters to the front and flanks. It gives timely warning of the movement of enemy reserves, and of impending counterattacks. When enemy air support and armor is capable of interfering with the landing, the platoon takes part in the antiaircraft and antimechanized warning systems.

CHAPTER 5

ANTITANK MINE PLATOON

Section I. GENERAL

- **160. ORGANIZATION.** The antitank mine platoon consists of a platoon headquarters and three antitank mine squads. The platoon carries its equipment and supplies on weapons carriers.
- a. The platoon headquarters consists of the platoon leader, the platoon sergeant, the draftsman, truck drivers, and a surveyor and instrument man. The truck drivers are armed with submachine guns. The platoon leader and all other platoon headquarters men are armed with carbines. The weapons carriers are in platoon headquarters. Each weapons carrier is equipped with a winch, and carries an axe, a pick, and a shovel. The platoon headquarters also is equipped with enough additional pioneer tools for all the men of the three squads. The mine probes, mine detector sets, and the aiming circle are in the platoon headquarters.
- **b.** Each antitank mine squad consists of a squad leader, an assistant squad leader, and pioneers. All of these men are armed with rifles. Each squad has a demolition kit.

161. DUTIES OF PERSONNEL. a. Platoon headquarters.

(1) The platoon leader commands the antitank mine platoon. His duties include—

- (a) Responsibility for his platoon's training, discipline and operation.
- (b) Performing missions assigned by the regimental commander, the headquarters company commander, the commander of a battalion to which the platoon may be attached, or any other officer under whom he may be operating.
- (c) Advising other commanders in the regiment on antitank mine matters.
- (d) Reconnoitering for and recommending mine field locations.
- (e) Supervising the laying and removing of mine fields.
- (f) Preparing and transmitting reports of all mines laid or removed by his platoon to the next higher commander.
- (g) Establishing and maintaining guards over mine fields laid or taken over by his platoon until relieved by other units.
- (2) The platoon sergeant is the second in command. His duties include—
 - (a) Assisting the platoon leader and replacing him during his absence.
 - (b) Supplying mines to the platoon, including locating and establishing local mine dumps.
 - (c) Supervising the recovery of previously laid mines.
 - (d) Commanding a detached element of

the platoon when one or more detachments are used independently.

- (3) The draftsman and the surveyor and instrument man operate together. The draftsman assists the platoon leader in making plans for the lay-out of mine fields. The surveyor and instrument man also assists in locating the mine field pattern on the ground. They survey and prepare sketches to accompany the reports of the mine fields laid and removed.
- (4) The truck drivers operate the platoon transportation. They draw mines from supply sources and deliver them to the platoon.

b. Antitank mine squad.

- (1) Each squad leader is responsible to the platoon leader for his squad's training, discipline, control, and the execution of its missions. His duties also include—
 - (a) Designating to the squad the area in which it is to be used and supervising its work.
 - (b) Seeing that mines are laid at the proper distance from areas to be occupied by friendly troops.
 - (c) Using the squad under the direction of a unit commander to which the squad may be attached.
 - (d) Assisting the commander to whose unit he is attached by acting as an advisor in matters concerning the use of

- mines and demolitions, and by pioneer work.
- (2) The assistant squad leader assists the squad leader and replaces him during his absence.
- (3) The pioneer's duties include-
 - (a) Laying, marking and reporting antitank mine fields. Activating antitank mine fields, and placing antipersonnel mines and booby traps when engineers are not available to do so.
 - (b) Reconnoitering and breaching mine fields.
 - (c) Disarming, lifting, and destroying activated antitank and antipersonnel mines and booby traps of both friendly and enemy types.
 - (d) Defending mine fields, road blocks, and other obstacles.
 - (e) Doing pioneer and demolition work for regimental headquarters and regimental units other than battalions, when required.

162. EQUIPMENT AND SUPPLY. a. The antitank mine platoon is euipped to site, lay, mark, record, and recover mines; locate and gap enemy mine fields; install and clear road blocks; and to do hasty pioneer and demolition work. Equipment provided for siting and recording mine fields includes the lensatic compass, an aiming circle, and a sketching equipment set. Mine probes and electrical mine detectors are provided to locate buried mines.

Bayonets also may be used to probe for mines. Pioneer tools including axes, picks, and shovels are provided for hasty road improvement and construction of obstacles. Electric lane markers are available for marking mine field lanes at night. This equipment can be transported on one 1-ton trailer. Additional equipment and supplies are obtained from supply sources.

b. During defensive operations, the antitank mine platoon requires a considerable supply of mines. trip flares, bulk explosives, firing devices, and accessories. The regiment's basic load of antitank mines and explosives is carried in the vehicles of the antitank mine platoon. Additional mines and explosives are obtained from ammunition supply points. The same vehicles are used for resupply. They can haul enough mines in one trip to lay a standard six-row mine belt about 300 yards wide. Engineer supply points provide barbed wire, pickets, tracing tape, signs and electric lane markers to mark mine fields, and additional pioneer tools. Signal supply points provide replacements for electronic mine detectors. The platoon leader initiates and coordinates resupply with the headquarters company commander, the regimental munitions officer and the S-4.

163. RECORDS AND REPORTS. a. The antitank mine platoon leader keeps an accurate record of receipts and expenditures of mines to show the number on hand at any time. This is a check against reports of mine fields laid, and is an aid to mine recovery. All mined areas are recorded on large

scale diagrams. Each mine field laid by the platoon is reported to division or task force head-quarters on standard forms. These forms are covered in the division or a higher echelon SOP. Suggested forms are shown in FM 5-31. Each mine field location report is accompanied by a detailed mine field record. These forms show the location, the pattern, and topographical reference points of the mine field, together with a diagram of each section of the mine belt (fig. 42). Changes are reported in a similar manner. Antitank mine distances are shown in yards; antipersonnel mine distances in feet.

b. The recording party consists of the draftsman and the surveyor and instrument man. They determine the topographic reference point coordinates, and the azimuth and length of each segment of the rear reference tape or reference line between direction changes. The mine field record is consolidated from the squad leaders' reports, and includes the location and layout of the mine field, the types of mines used, and the position of all lanes. When antipersonnel mines or activated antitank mines are used, sketches showing the position of each device and trip wires attached to it are included. Mines laid for local security normally are not reported, but are guarded and removed when the area is vacated. Should enemy action prevent complete clearance of these security mine fields, a report of all unlifted mines is made to division or task force headquarters as for any other mine field.

SECRET

DETAILED AT MINE FIELD RECORD

	REPORT NO							
1.	ORGANIZATION AT MINE PLATISTINE SHEET NO 2 OF 6							
ż.	MAP REFERENCE Ochillee 1: 25,000 Sheet 4048 IV NE							
3.	AUTH FOR LAYING CG 5th Inf Div DATE LAID 6 June 1948							
4.	TOPO MAR	TOPO MARKER: DESCRIPTION R.J. OKING - Ft. Benning						
			COORD	INATES7	2585			
			DIS (AZ TO AUX M	ARKER Z	00 Yds	195°	
				RT RE	A Paris	STAKE		
5.	AUX ILIAN	Y MARKER	DES	CRIPCION BUT	ed 5 gal	gasoline	_can	
							75 Yds 165*	
6.	NUMBER (P ROUS	6	DIS	BETWEEN I	rows <u>6</u>	Yds	
7.	DISTANCE	tir	÷.				ied	
8.	AT MINES TATE HUMBER 1458 TYPE M7 HUMBER 516 TYPE M6							
	HUMBER TYPE TOTAL 1974							
	•							
9.	APERS	N)	DEER	TYPE	_ TOTAL 19	374	e <u>M3</u> total <u>91</u>	
9. 10.		n Mines lad	DABER DINUN	TYPE	TOTAL 19	974 R <u>(O</u> TYF	e <u>M3</u> total <u>91</u>	
	Mine FI	MINES LAII ELD MARKII	nvener Dinton No: S	TYPE	M2 NUMBE	974 R <u>(O</u> TYF	e <u>M3</u> total <u>91</u>	
10.	Mine FI	MINES LAII ELD MARKII	nvener Dinton No: S	EER 81 TYPS ingle strand is an rear f	M2 NUMBE	974 R <u>(O</u> TYF	E M3 TOTAL 91 e field. Red	
10.	triangle	MINES LAII ELD MARKII	nvener Dinton No: S	TYPE EER 81 TYPE ingle_strand	M2 NUMBE	974 R <u>(O</u> TYF	E M3 TOTAL 91 e field Red HOW MARKED	
10.	triangle	MINES LAID ELD MARKII 25 yd i	DIEDER DIE NOTE NOTE S otherwa	TYPE EER 81 TIPE ingle strand Is an rear f DIS FROM SECT REF	TOTAL 15 M2 NUMBE fence are	274 R 10 TYP ound entir	E M3 TOTAL 91 e field Red	
10.	triangle	MINES LAID ELD MARKII 25 yd i SECTION	DEER DE NUMERO SE	TYPE EER 81 TYPE ingle strand Is an rear f DIS FROM SECT REF FOIRT	TOTAL 15 M2 NUMBER fence around	PT4 R 10 TYP pund entir	E M3 TOTAL 91 e field Red HOW MARKED	
10.	triangle LAMES: LAMES: 1	MINES LAD ELD MARKIN 25 yel SECTION AB CD	DEER OF NOTE OF STREET	TYPE EEER 81 TYPE ingle strand Is on rear f DIS FROM SECT REF POINT 210 Yds 275 Yds	TOTAL 15 MI2 NUMBER fence are sence TENGTH TO Yds 60 Yds	WIDTE	E M3 TOTAL 91 e field Red HOW MARKED FOR Wheel in Editant fores Same	
10.	triangle LAMES: LAME HO 1 2 PROVISI	MINES LAID EID MARKII 25 yd 1 SECTION AB CD ONS FOR C	NG: Sinterval 200° 165° LOSING	TYPE EEER 81 TYPE ingle strand Is on rear f DIS FROM SECT REF POINT 210 Yds 275 Yds G LARES ** Co	TOTAL 15 M2 NUMBER fence are ence IENGTH 70 Yds 60 Yds	PIDTE 10 Yd5 10 Yd5 repared	E M3 TOTAL 91 e field. Red HOW MARKED FOOG WINES IN FEBRUARY FROM	
10.	triangle LAMES: LAME HO 1 2 PROVISI	MINES LAID EID MARKII 25 yd 1 SECTION AB CD ONS FOR C	NG: Sinterval 200° 165° LOSING	TYPE EEER 81 TYPE ingle strand Is on rear f DIS FROM SECT REF POINT 210 Yds 275 Yds G LARES ** Co	TOTAL 15 M2 NUMBER fence are ence IENGTH 70 Yds 60 Yds	PIDTE 10 Yd5 10 Yd5 repared	E M3 TOTAL 91 e field Red HOW MARKED FOR Wheel in Editant fores Same	
10.	triangle LAMES: LAME HO 1 2 PROVISI	MINES LAID EID MARKII 25 yd 1 SECTION AB CD ONS FOR C	NG: Sinterval 200° 165° LOSING	DIS FROM SECT REF POINT 210 Yds 275 Yds Signar	TOTAL 15 M2 NUMBER fence are ence TENOTH TO Yds 60 Yds after chg. F	WINTE 10 Yds	e field Red HOW MARKED Food wined in grane Same Guard to install.	

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Figure 42. Each mine field report is accompanied by an operational mine field sketch.

SECRET

DETAILED AT MINE FILLD RECORD

- 1. MINE BELT SECTIONS AB BC CD SHEET NO. 3 OF 6
- 2. PATTERN USED SIX ROW ANTITANK MINE BELT PATTERN
- 3. DATA:

SECTION	AZIMUTH	DIS IN YDS	AT MINES		APERS MINES		NO OF BOORY	
			NO	TYFE	NO	TYPE	TRAPPED MINES	
AB	102°	410	300 306	M6 M7	45 2	EASM	15	
ВС	84°	150	225	MG		this	15	
CD	53°	440	600 60	M6	5 2	EAR M2	3	
DE	SEE S	HEET4		i.				
EF)			4.				

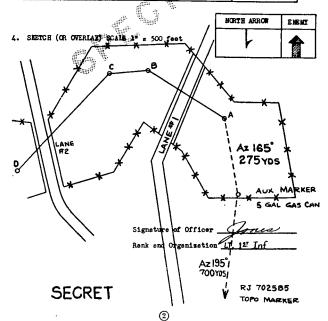


Figure 42.-Continued.

SECRET

DETAILED ANTIPERSONNEL MINE RECORD
(To accompany detailed AT mine field record)

	(bord go serron wi	mine lieto lecol	a)	
1.	SECTIONCD	SHEET	report	NO <u>7</u>	
2.	TO ACCOMPANY SHEET	3	REPORT NO.	_7	
3.	SKETCH:	OST	TO2		•_
	X10	* o	***************************************	9	SECTION RIGHT BOUNDARY TAPE
	D	REAR REFER	ENCE TAPE		
					•

Scale: NOT TO SCALE

4. DATA

MINE NO	TYPE OF APERS MINE	TYPE MINE BOOBY - TRAPPED	TYPE. OF FUZE	DIS FROM SECT RT BOUNDARY TAPE (FEET)	DIS IN FRONT OF FORWARD REF TAPE (FEET)	DIS FROM REAR REF TAPE (FEET)
	ЕМ		ComeMi	38		47
2	M 2		PULL MI	247	28	
3		MG	Pull Mi	376		48
4	M2		PULL NI	500		18
5	M2		Poul Mil	700	18	
6		MG	RELEASE M.5	790		48
7	EM		Come Ma	920		22
8	W5		PuuMi	1005	19	
9	MZ		Pull M	1210		43.
ō		MG	Pull MI	1330		47
TOTAL	7	3				

SECRET

Signature of Officer Control of Inf

§ Figure 42.—Continued.

- 164. TRAINING. a. Because of its specialized operations, the antitank mine platoon training is conducted independently of the remainder of the headquarters company for those subjects which are peculiar to the platoon. The training is consolidated under company control in subjects which apply also to other elements of the headquarters company. During basic unit training, the headquarters company commander allots the time for squad and platoon training to the antitank platoon leader. This training emphasizes the technique of mine laying, marking, recording, reporting, reconnaissance, breaching, removing and recovering mines, the use of demolitions, and pioneer work by squad and platoon teams.
- b. Tactical field exercises with battalions and the regimental tank company are conducted during advanced unit training. Antitank mine training is coordinated with the regimental tank company commander, who is also the regimental antitank officer.
- c. Practice mines or dummy mines are used extensively in training. Mine fields are sited, marked, safeguarded, recorded, and reported by one portion of the platoon, and are reconnoitered, lanes marked, breached, and recovered by a different portion of the platoon until all men are proficient in all phases of mine handling and in working together as a team.
- d. The truck drivers, the draftsman, the survey and instrument man, and other specialists may attend local schools in their specialties before and during basic unit training and advanced

unit training. Leadership training and noncommissioned officer schools are conducted under company or regimental supervision. Training in handling explosives and demolitions, in installing and disarming booby traps, in pioneer work, and in certain phases of mine field training may be conducted under the division engineer's supervision. When practicable, arrangements are made for the men to participate in training with attached division bomb disposal units.

Section II. TECHNIQUE

- 165. COMBAT ORDERS. The antitank mine platoon leader receives orders or is given tasks from the regimental commander or S-3, the headquarters company commander, the regimental antitank officer (tank company commander), or the commander of the unit to which his platoon is attached. Usually, he issues his orders orally to the platoon sergeant, the truck drivers, the draftsman, the surveyor and instrument man, and to the squad leaders. The platoon leader's orders include—
- a. Information of the enemy including his capabilities regarding the use of armor, and any of his characteristic actions observed during the previous enemy armored operations.
- b. Information of friendly operations including the disposition of antitank weapons; the construction of obstacles; the location of front-line units whose fires cover the mine field, or whose troops may be endangered by the mine field; the loca-

tion and missions of security elements; mine laying tasks assigned to rifle units; and pertinent parts of the mine field plan of higher commanders.

- c. Terrain information, including an evaluation of probable enemy tank approaches and existing natural obstacles.
- **d.** The *platoon mission*, including the detachment of any of its elements and the mission of units to which they are attached. The location and priorities of mine fields to be laid.
- e. Specific instructions to squad leaders and men to include—
 - (1) The siting party, the marking party, laying and arming parties, and any other duty assignments.
 - (2) Men to lay antipersonnel mines and booby traps and to activate antitank mines.
 - (3) Priority of mine fields and other missions with respect to each other.
 - (4) Burial and camouflage of mines.
 - (5) When the antitank mine field will be taken over by some other unit.
 - (6) Location of the area to be mined, reconnoitered, cleared, improved or worked on by each detail, and the route to be followed.
 - (7) Coordination to be made with other units laying mine fields.
- f. Supply instructions, to include the location of supply points and local mine dumps; the procedure for drawing supplies, and the disposition

of transportation; the procedure for the platoon's detached elements which are to operate under some other commander.

g. Location of the platoon leader or unit commanders to which the detachments are to report.

166. STANDARD SIX-ROW ANTITANK MINE BELT. a.

Antitank mines are laid in a standard six-row mine belt pattern. The mine belt consists of a number of mine field sections connected in an irregular line across the front of the area to be denied to enemy tanks. Each section is 30 yards deep and contains six parallel rows of mines 6 yards apart. The three forward rows are echeloned with respect to the remaining rows. Every segment 4 yards wide across the rows includes six mines. As a result of this pattern the density of a standard, six-row mine belt is one and a half mines per yard of front.

- b. During enemy counterattacks, or for local security against enemy tanks, it may be necessary for the security forces to scatter mines hastily. In this case, the mines are laid and armed on the surface of the ground or the roadbed and left uncovered. They are laid in a standard pattern and marked or guarded and are covered by fire of small arms and antitank weapons. These mines are recovered when they are needed no longer. If the situation continues, they are buried in a standard pattern, recorded, and camouflaged.
- c. One or more squads do the mine laying in three stages as follows: a siting party designates the trace and pattern; a laying and arming party

lays and arms the mines; and all squads bury and camouflage the mines.

- d. The platoon leader designates the siting party and one or more laying and arming parties at the beginning of each mine laying operation (fig. 43). When the entire platoon operates together, one squad provides the siting party and men to construct the mine field marking fences. The two remaining squads are laying and arming parties. All three squads bury and camouflage mines after each section of the mine field is laid and armed, or after the entire antitank mine belt is laid and armed. The platoon leader designates the mine belt trace and all right boundary tape locations, and directs the installation of marking fences and warning signs. He also supervises the siting, the laying, the arming, the burying, the camouflaging, and the activating of mines. He collects all safety forks from the squad leaders. and has them buried beside the right rear reference stake.
- e. The platoon sergeant supervises the supply including drawing, transporting, and delivering the mines to the mine field location. He also assists the platoon leader in supervising the minelaying operations. During laying, arming and burying, the platoon sergeant tells the squad leaders which mines are to be activated or booby trapped. (An activated antitank mine is equipped with a supplementary firing device to explode the mine when moved or disturbed in any way.)
- f. The draftsman and the surveyor and instrument man survey and record the location and

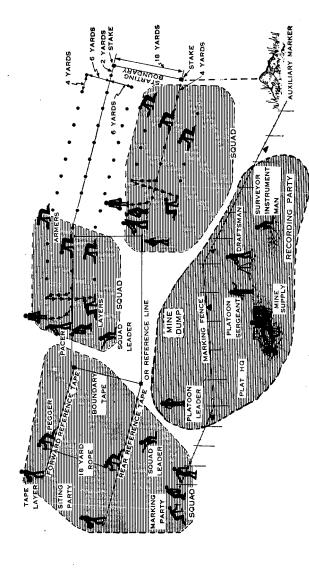


Figure 43. The platoon leader designates siting, laying and recording parties to lay a standard six-row mine belt.

trace of the mine field, and prepare records and reports showing the exact location of each section of the mine field. These operations proceed concurrently with the mine-laying operation.

g. Squad leaders and assistant squad leaders supervise the operations of their squads in their assigned missions. Each squad submits a detailed report showing the location and type of each antipersonnel mine, booby trap, and activated antitank mine. When a squad is operating separately, or performing more than one phase of the minelaying operation, the assistant squad leader supervises one phase. His duties then include siting, marking, or laying and arming.

167. SITING AND MARKING. a. In siting and marking a mine field each man is assigned a definite job. The squad leader sites the trace of the rear reference tape or reference line after the platoon leader locates it. Two pioneers install a right boundary tape, perpendicular to the rear reference tape, to connect the rear and forward reference tapes at each change of direction or at the beginning of each new mine field section. Two other pioneers install the forward reference tape 18 yards from the rear reference tape and parallel to it in the enemy's direction. Additional pioneers stake down the tape. Long stakes are placed on the front and rear reference tapes, at the start of each section, and at each change of direction. Where necessary, short stakes are placed to hold the tape in position. Starting marks are made on the tapes beginning 2 yards from the long stake along the front reference tape and 4 yards from the long stake along the rear reference tape.

- b. The assistant squad leader and the remaining pioneers erect marking fences and warning signs in an irregular trace a few yards in front and in rear of the mine field. The marking fence is a single strand barbed wire fence strung on long pickets or stakes. Each warning sign is an isosceles right triangle of tin, painted red. One warning sign is suspended from the barbed wire strand every 25 yards. One man helps the assistant squad leader erect the pickets or stakes, while the other man or men string the wire and suspend the warning signs.
- 168. LAYING AND ARMING. a. Each squad is organized into a group of layers and a group of armers. The squad leader is responsible for general supervision, for verifying the number of mines laid, and for collecting and turning over to the platoon leader all safety forks. One squad works along the rear reference tape and the other squad works along the forward reference tape. Starting 2 yards from the right boundary, the assistant squad leader of one squad marks off four 1-yard paces along the forward reference tape. The other squad operates similarly along the rear reference tape starting 4 yards from the right boundary.
- b. Each layer carries three complete antitank mines on each trip from the mine dump, or from the truck when mines are laid from trucks. He places one mine at the first mark made by the

assistant squad leader. He then takes 2 paces along the reference tape and 6 paces toward the front of the mine field and places the second mine. He places the third mine 6 paces in rear of the reference tape directly behind the second mine. He then returns to the mine dump or truck for three more mines. The next layer proceeds similarly, beginning 4 paces along the tape from the first mine.

- c. Each armer is assigned one row. He follows the layers, arming each mine in the row. He counts the fuzes in his carrying bag at the beginning and end of each row. He checks the number of fuzes used against the number of safety forks removed and the number of mines armed. He gives the safety forks to the squad leader.
- d. After the number of mines or the area designated by the platoon leader is laid, armed, and marked, the squads bury and camouflage the mines. Where booby traps are to be set, those mines are left unburied for a separate detail to activate and bury them. When the field is completely laid and recorded, all tape and other indications of the minelaying operation, except standard marking signs and fences, are removed.
- 169. ANTIPERSONNEL MINE BELT. a. The purpose of antipersonnel mines is to cause the enemy casualties and to hinder his activities. Unlike antitank mines, they are not used to block an area or route. Antipersonnel mines hinder the enemy's activities by the very threat of their presence, which causes him to be deliberate and cautious. For this reason, antipersonnel mines are laid in an irregular pat-

tern of varying density. They include pull-type and pressure-type mines. One or more trip wires are attached to each pull-type mine. The length of each trip wire is approximately the bursting radius of the mine. Trip wires are anchored to stakes or low bushes a few inches above the ground. Each mine in a cluster of mines is laid about 5 paces from the anchored end of the trip wire of the nearest adjacent mine. Antipersonnel mine field clusters are sited and laid as close together as the number of available mines and the area to be mined permits.

b. Antipersonnel mines usually are laid by engineers or under engineer supervision, rather than by the antitank mine platoon. However, the antitank mine platoon is trained to lay antipersonnel mines in conjunction with antitank mine fields, or to lay antipersonnel mine belts when engineers are not available. When the use of antipersonnel mines is authorized, the antitank mine platoon either lavs these mines or assists engineer troops in laving them. When antitank mine fields, road blocks, and other obstacles are difficult to cover by small arms tire, antipersonnel mines increase the effectiveness of these obstacles. This hampers the enemy mine field reconnaissance and causes casualties when he attempts to neutralize such obstacles. At night, trip flares are used in conjunction with antipersonnel mines to warn friendly troops of enemy activity and to indicate the enemy's exact location in the mind field. Proper siting, laying, and recording of antipersonnel mines requires a high degree of training.

- c. Siting an antipersonnel mine belt is done by a siting party of one noncommissioned officer and three pioneers, under the platoon leader's direction. This party lays out tracing tape on the ground as indicated by the platoon leader and marks the trace between points of change in the direction of this reference.
- d. Antipersonnel mines are laid in belts consisting of one or more clusters of mines. Each cluster consists of three mines laid in an irregular triangle with trip wires attached. Additional pressure-type mines may be added to the cluster. Each squad is organized into three-man details. Each detail lays one antipersonnel mine cluster at a time. The squad leader indicates the location of each mine. He supervises the burying, arming. and camouflaging of mines in each cluster (fig. 44). When antipersonnel mines are laid in an antitank mine section, a separate antipersonnel mine detail lays, arms, and camouflages the antipersonnel mines. This is done after all antitank mines in the section are laid and armed. More than one antipersonnel mine cluster of three mines each may be laid in any antitank mine field section. Antipersonnel mines are laid far enough from the antitank mines, and from other antipersonnel mines to prevent simultaneous detonation of more than one mine. The standard marking fence for antipersonnel mines is a single strand barbed wire fence. Standard mine field marking signs are modified to indicate the presence of antipersonnel mines.

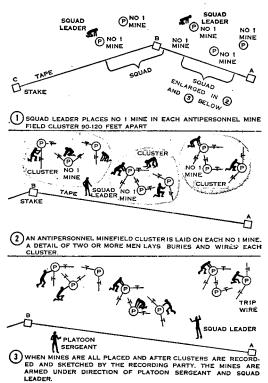
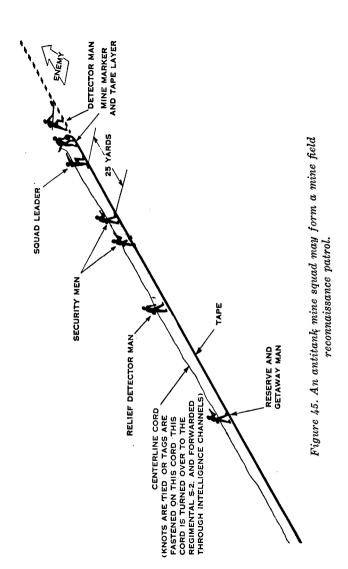


Figure 44. The squad leader designates men to lay antipersonnel mine field clusters, and supervises laying, burying, arming, and recording.

- e. The platoon leader sees that the mine fields are safeguarded by fences and warning signs on all sides and protected by fire.
- 170. REMOVING MINE FIELDS. a. Reconnaissance begins immediately after the contact is made with a mine field. The purpose of mine field reconnais-

sance is to locate the near edge, the extent of the frontage, any existing gaps, the depth, trace, and pattern, types of mines, and the location of successive belts of mines of a mined area: to determine the location of related obstacles such as swamps and antitank ditches; and to locate any existing routes through such obstacles. Mine field reconnaissance may last for only a few minutes, as in the case of a column stopped by an antitank mine road block, or it may continue indefinitely in a static situation. Information on enemy mine fields is obtained primarily by patrols. Additional information may be obtained from friendly units. aerial photographs, interrogation of prisoners of war, captured enemy maps and mine field records. and from local inhabitants. In the deliberate removal of a friendly mine field, the mine field record is used to check the removal of all mines.

b. Each antitank mine squad is capable of a deliberate mine field reconnaissance (fig. 45). Two men cover each squad with small arms. The remaining men are equipped as lightly as possible. A reserve and getaway man may be used as a replacement. He reports to the platoon leader all information obtained by the reconnaissance party. The squad reconnoiters a 3- to 6-foot path through the mine field. The squad starts at a predetermined point and stops when it reaches the enemy side of the mine field. It examines all mines and booby traps in the footpath. Whenever a new type mine can be disarmed and removed, it is turned over to the regimental S-2 for study by technical intelligence agencies. The reconnaissance record is a



centerline cord on which knots are tied, or tags are fastened to indicate the location and type of each mine. This cord is turned over to the regimental S-2, and forwarded through intelligence channels.

- c. When time does not permit the deliberate removal of an entire mine helt or mine field section, lanes may be breached through enemy mine fields before an attack. Breaching operations are concealed by darkness smoke, or supporting weapon's fire. Fire support is provided for the breaching personnel when it will not conflict with measures to preserve secrecy. Before an area is cleared, it is outlined with white tape. Initially, an 8-foot lane is cleared for troops; next, an 8yard lane is cleared for one-way vehicle traffic: and finally a 16-yard lane for two-way traffic (fig. 46). Breaching resembles a river crossing operation. It requires the establishment of a bridgehead on the enemy side of the mine belt to cover the widening of the lanes for tanks and other vehicles supporting the attack. Mines are located for removal, by the electrical detector method or by probing. They are removed by using explosives or ropes. or by hand. When removing mines by hand, the lifters work at least 25 yards from each other and from other personnel.
- d. Electrical mine detectors are used to locate metallic mines. When they are used, each squad is divided into two detecting and lifting teams consisting of one detector and two lifters each. Each

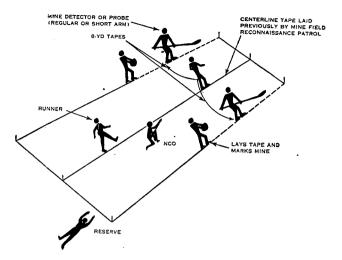
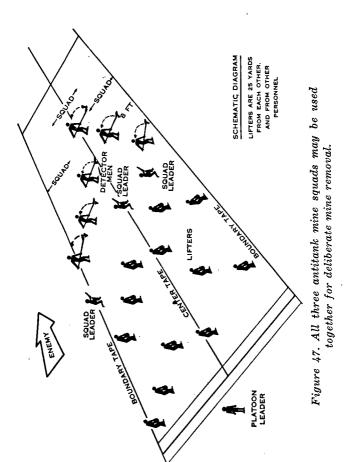
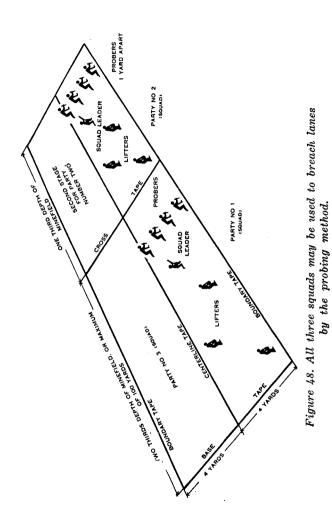


Figure 46. Antitank mine squad may form a taping party for breaching mine field lanes.

team clears a lane 8-feet wide. When the entire platoon is used, a standard 16-yard lane is cleared by using six electrical mine detectors (fig. 47).

e. Probing is used as a method of mine detection when mines are encountered that cannot be located by electrical detectors. Using four probers, each squad clears a 4-yard lane. Three squads clear an 8-yard lane, by dividing the mine field into areas as shown in figure 48.





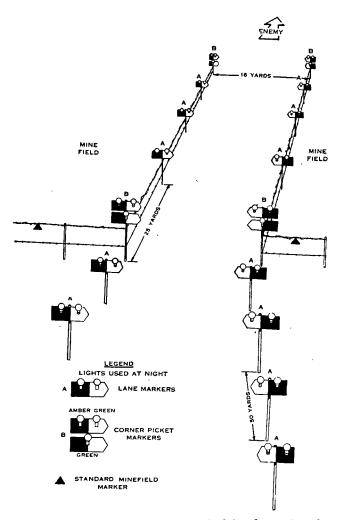


Figure 49. Mine field lanes are marked for day and night.

- f. Explosives are used frequently to clear footpaths or vehicle lanes when secrecy can be sacrificed and speed is paramount. Heavy linear charges such as the "snake" described in FM 5-31 are obtained from ammunition supply points. This method is not always dependable, particularly over broken ground or heavily overgrown areas, but can be used with minimum exposure of the troops. Some heavy linear charges are designed to be placed and fired by men protected in tanks.
- g. A lane is tested before it is opened for traffic. To detonate any mines overlooked or buried below normal depth, each lane is checked with a pilot vehicle, preferably an armored vehicle. The driver is protected by sand bags, by having the fuel tanks almost empty, and by taking rapid escape measures. Cleared lanes for vehicles are clearly marked for day or night use (fig. 49).
- 171. ROAD BLOCKS. a. Road blocks are covered initially by fire and designed to stop vehicles moving along a single route. Road blocks are located in defiles; where a road runs through dense woods or through a swamp, in ravines, between high banks, or on other terrain where it is difficult for vehicles to pass or move off the road. To gain surprise, a road block is best located behind a hill crest or a bend in the road where it is concealed from enemy observation. A camouflaged road block increases surprise. A road block located in defilade as well as in concealment is less vulnerable to enemy fire.
 - b. The antitank mine platoon is capable of con-

structing road blocks in the form of abatis, craters, and bridge and road demolitions. It also uses overturned vehicles or other expedients. Antitank mines laid across a road and adjacent bypasses provide an effective road block when covered by fire. The type of road block used depends upon its location, the enemy situation, the available materials and time, and the ability to cover the road block by fire. Antitank mines provide the most expedient type of obstacle. An abatis can be constructed with more effort and additional time, but requires less material. Any physical barrier must be strong enough to withstand direct fire and the crushing power of modern armored vehicles. Craters and bridge demolitions often are more effective and easier to make in natural defiles. A road block may contain several types of obstacles. For example, a crater may have antitank mines on its flanks to prevent hasty bypassing. On an important route of enemy movement a road block is constructed in depth, either at intervals where craters and mines are used, or continuously when abatis are used.

- c. The road block is located and constructed to deceive the enemy of its type, location, and extent. A moderate number of dummy road blocks causes some delay. The delay caused by a road block which cannot be bypassed includes the time required for the enemy to deploy, maneuver and drive off the defenders, plus the time required to reduce, neutralize, or remove obstacles.
- d. A road block is defended by antitank weapons, automatic weapons, and riflemen. Artillery

fires are available, on call, when range and communication permit. Defenders choose commanding ground with good observation, fields of fire, cover and concealment in front or on the flanks of the obstacle (fig. 50). Routes of withdrawal of defenders and weapons carriers are planned in advance and coordinated with other road blocks to the rear.

- 172. EXPLOSIVES AND DEMOLITIONS, q. The antitank mine platoon is trained to use high explosives for demolition work. It is equipped with a limited amount of explosives and accessories for the construction of nonelectric charges. Demolitions are used to blow road block craters, to destroy enemy obstacles, to destroy enemy emplacements, to gap enemy mine fields, and for other purposes. In retrograde movements important bridges and roads through critical defiles are prepared for demolition. Such charges are guarded until blown. Men responsible for blowing them are carefully instructed to insure timely detonation, to prevent our own troops from being cut off, and to guarantee that the enemy is delayed. Craters and demolitions, like other obstacles, are more effective when covered by fire.
- **b.** A primer is a small explosive charge, usually a half-pound block, used to accomplish positive and complete detonation of the main charge. Nonelectric primers are assembled from the nonelectric cap, the time fuze, and the fuze lighter. These are accessories found in the demolition kit authorized for the antitank mine platoon.

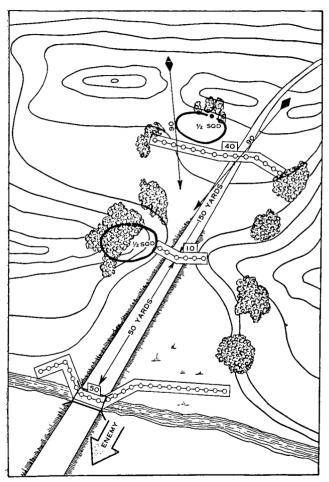


Figure 50. Antitank mines in a road block are laid in depth and covered by riflemen and antitank weapons.

- c. A time fuze burns at approximately 40 seconds per foot. Before constructing the primer, a short piece of time fuze is tested to determine the exact burning rate. Based upon the rate, as determined by test, a length of fuze is cut long enough to permit the firer to reach a place of safety. One end of the fuze is inserted snugly into a nonelectric cap and the open end of the cap is carefully crimped on the time fuze with a pair of cap crimpers. The plugged end of the fuze lighter is opened and the remaining end of the fuze is forced completely into the fuze lighter. Finally, the cap is carefully inserted into the well of a primer and tied in place. When a plastic explosive is used as a primer, a piece is molded tightly around the cap. When the fuze lighters are not available, a match is inserted in a half-inch cut in the fuze. The primed explosives block then is ready to place in the main charge. The main charge surrounds the primer and is in close contact with it. For critical charges to be used in assault operations, two separate primers are used and both are ignited together to insure detonation. FM 5-25 contains a discussion of demolition charges and safety rules.
- d. The main charge is the explosive itself. Two factors determine its effectiveness—the amount of the explosives and the placing of the charge. It is better to overestimate than to underestimate the charge. Charges are placed close to or inside of the object to be destroyed. Placing sand bags or similar material over a charge to confine it increases its effectiveness. Charges made of stand-

ard issue explosives are calculated by simple methods as explained in FM 5-25. When placed in contact with timber or steel and securely fastened, one pound of TNT, as a rule, cuts a piece of timber whose cross section has an area of 40 square inches, or a piece of steel whose cross section has an area of two thirds to one square inch. Bridge demolition, road cratering, and wall breaching require large quantities of explosives, and special placing arrangements which are shown in FM 5-25.

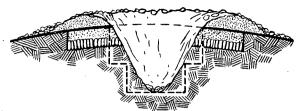
e. Charges may be improvised from land mines, aerial bombs, or artillery shells. Approximately one-half of a land mine's total weight is explosive material. When placed against the pressure plate of one mine that has been fuzed, a primer made up with one-half pound block of explosive is adequate to detonate a large number of mines. General purpose aerial bombs make suitable cratering charges, particularly when placed in a culvert under a road. Bombs of under 500 pounds require a primer and 5 pounds of explosive in contact with the middle of the bomb body. Bombs of over 500 pounds require a primer and 10 pounds of explosive. Separate priming is necessary for each large bomb. Artillery shells are not efficient for demolition because of their relatively small explosive content. Shells up to 340-mm are detonated by 2 pounds of explosive placed in contact with the shell just forward of the rotating band. Dud shells or bombs, or land mines that have been subjected to artillery fire are not used for demolition. The explosive equipment in the demolition kit includes explosives, firing devices, and accessories to prepare one or more charges for nonelectric detonation. For extensive work it is necessary to obtain additional explosives in bulk and some accessories such as time fuze, detonating cord, and caps. For the use of various types of explosives and detonators in demolition work, see FM 5-25.

173. PIONEERING. a. The construction of simple structures or obstacles is possible, using hand tools in the field. The antitank mine platoon is: trained to construct obstacles, covered shelters, culverts and short span bridges, and to maintain roads and trails. The platoon uses pioneering methods in this work. The tools available to the platoon include axes, picks, and shovels to equip all platoon members at one time. Explosives are valuable aids to pioneering, especially where power-driven cutting tools are not available and speed is essential. Expendable materials used in pioneer work include large nails, heavy wire, and rope. Standing timber or locally available lumber is required for certain tasks. The truck-mounted winch is useful in handling timber and other heavy materials.

b. Obstacles are constructed using pioneering methods and whatever materials are available. Axes are available for cutting timber; however, it may be cut by using explosives. Truck winches are used in moving abatis, timber, and other materials into position to reduce the amount of man handling. To construct antitank ditches involves extensive use of heavy earth moving equipment, or

explosives. Both of these methods are beyond the normal capabilities of the antitank mine platoon. The limited manpower and light equipment of the antitank mine platoon usually restricts their construction to the improvement of natural gullies or ravines by steepening the sides.

- c. Covered shelters sometimes are required to permit continuous operations in inclement weather when buildings are not available, or during heavy enemy fire. Covered emplacements are described in FM 5-15.
- d. Road and trail mainetnance is necessary to accommodate vehicular traffic and to provide bivouac access routes. Hand tools are used to improve trails. Road and trail maintenance is done by opening up ditches, improvising firm surfaces for fordable stream bottoms, replacing washed out culverts, and repairing craters.
- e. Craters are repaired by digging out the loose debris, squaring up the sides and bottom, and refilling with rock, sand bags, log cribbing, or rammed earth (fig. 51).
- f. Short span bridges can be built readily from felled timber by using hand tools and a truck winch. When sound, 18-inch log stringers are used on firm foundations, these hasty, timber bridges can support 55 tons over a 15-foot gap. For construction and maintenance of roads, trails, culverts, and bridges, see FM 5-10.



THE SIDES OF THE CRATER ARE SQUARED OFF



THE CRATER IS THEN FILLED WITH ROCK-



OR TIMBERS, AND LEVELED WITH MATERIAL SIMILAR TO THE ORIGINAL ROAD BED

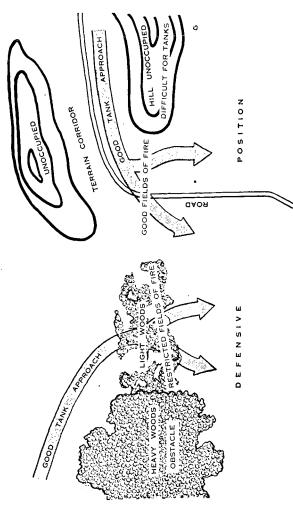
Figure 51. The antitank mine platoon is trained to repair craters.

Section III. TACTICAL EMPLOYMENT

- 174. GENERAL. The antitank mine field is a tactical obstacle. Its location and trace are coordinated with the locations and missions of other obstacles and weapons. This is done to preserve the integrity of the fire plan and the offensive scheme of maneuver or defensive organization of the ground. The antitank mine platoon may be supplemented by mine laying details from other infantry units. The extent of any mine field is limited by time and the availability of mines or men. Therefore, the tactical effectiveness of a mine field can be increased by connecting the mine field to some other obstacle which will also stop or divert hostile tanks, or impede their progress so that antitank fire can be massed upon them. A stream, gully, heavily wooded area, man-made ditch, or dummy mine field can be used to extend a mine field in this manner. Antitank mine fields are classed as unit mine fields, division mine fields, nuisance mine fields, and dummy mine fields. The antitank mine platoon may lay or assist in laying unit, nuisance, and dummy mine fields, or sections of a division mine field. Mines laid temporarily for local security are not classified as mine fields.
- a. A unit antitank mine field is laid for the improvement of the defense of a unit by providing protection to a position. When time permits coordination by higher commanders, unit mine fields may become a part of a division mine field.
- **b.** A division antitank mine field is a large scale mine belt. It is laid under the division engineer's supervision for the protection of the division as

a whole. It is based on an over-all barrier plan developed by the division commander and his staff, or by higher headquarters.

- c. A nuisance antitank mine field is laid during retrograde movements to delay the enemy or to cause him to avoid routes that favor his advances. Mines are not marked, and are scattered in non-standard patterns, individually concealed, and normally not covered by defensive fire. Only an army or separate task force commander acting alone can authorize this installation. It frequently includes a large proportion of antipersonnel mines.
- d. A dummy antitank mine field is a simulated obstacle employed to delay and confuse the enemy. They may be located alone or used to extend and supplement live fields. Dummy mine fields may be installed by any unit but their placement should be supervised by an engineer officer to insure that they resemble live mine fields.
- e. Terrain evaluation is the basis for the decision as to the antitank mine field's location. In open terrain, mechanized units seek a more protected approach route, when possible, to avoid hostile antitank fires. Tanks seek terrain corridors and other defiladed routes of approach which serve to limit the use of antitank weapons. By blocking natural approaches, antitank mines force enemy tanks into the open. This reduces the number of antitank guns needed to defend the area and increases their effectiveness in covering the area as a whole (figs. 52, 53, and 54).



armor, existing tank obstacles, and the number of mines available influence evaluation of terrain for antitank Figure 52. Defensive field of fire, routes favoring enemy defense.

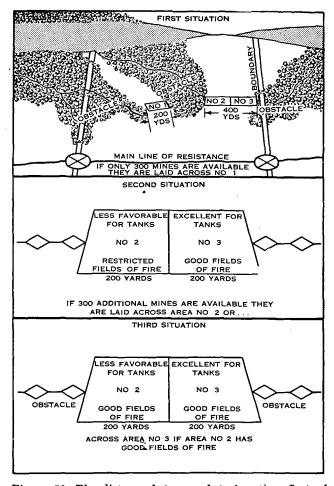


Figure 53. The distance between obstacles, the effect of the terrain on tank maneuverability and fields of fire, and the number of mines available determine the location of a mine field.

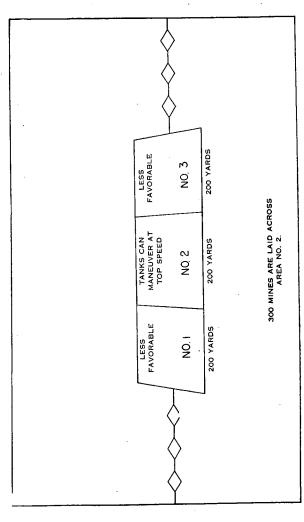


Figure 54. Considerations of tank maneuverability may outweigh the desirability of connecting obstacles.

- f. Local security is provided to protect mine fields against enemy reconnaissance and removal. Undefended mine fields delay the enemy only so long as it takes him to locate and remove the mines. However, small-arms fire prevents his deliberate removal of the mines and hinders his reconnaissance of the actual and dummy mine fields. Automatic weapons are desirable mine field security. Antitank weapons sited to cover mine fields increase the effectiveness of the mines by destroying damaged or disabled tanks in the mine field and preventing the enemy's use of special mechanized vehicles designed to neutralize mine fields. The antitank mine platoon or a platoon detachment is responsible for defending the mine field with small-arms fire until relieved by higher authority.
 - g. The antitank mine platoon missions include-
 - (1) Laying, camouflaging, marking, recording, and reporting antitank mine fields.
 - (2) Preparing dummy mine fields or dummy sections of actual mine fields.
 - (3) Preparing and protecting road blocks.
 - (4) Reconnoitering mine fields and sending men with mine reconnaissance patrols from other units.
 - (5) Removing or breaching, marking, recording, and reporting enemy or friendly mine fields.
 - (6) Salvaging unexploded mines.
 - (7) Delivering mines to other units.
 - (8) Laying, camouflaging, marking, recording, reporting, neutralizing, and recov-

- ering antipersonnel mines and booby traps.
- (9) Pioneering missions such as preparing demolitions and constructing obstacles.
- (10) Guarding mines and mine fields.
- 175. MOVEMENT TO CONTACT. a. During route column the antitank mine platoon moves administratively; however, the men and equipment are loaded so that it can change quickly into a tactical column. The basic load of mines, explosives, demolitions, and individual ammunition is either carried forward during the route column, or obtained from supply sources at the beginning of the tactical column. The platoon may assist in removing enemy mines and other obstacles. The need for mines in antitank defense normally is not expected during route column.
- b. During tactical column the antitank mine platoon ordinarily moves with the main body of the regiment. The regimental commander directs its use. The platoon or a detachment may be attached to a security force to assist in installing or removing road blocks, locating and breaching enemy mine fields, or clearing roads and mines. It may also construct mined road blocks across defiles to protect the main body against surprise mechanized attacks. When road blocks are used, they are covered by friendly small arms and antitank fire. Mines are recovered so that they do not endanger friendly troops and vehicles. They are used again when recovered undamaged.

- c. When the advance, flank, or rear guards are likely to encounter enemy armor, mines are kept in readiness to block roads for the advancing column's protection. Flank protection is provided by placing mined road blocks across routes leading in from the flanks. On temporary halts and in bivouac, the antitank mine platoon helps provide local security against enemy mechanized and other vehicles for the regimental command post or the entire bivouac area. This is done by establishing road blocks or by laying mines across likely tank approaches into the occupied area. These are located as directed by the regimental commander or the commander of the unit to which the platoon or a detachment is attached.
 - d. Placing the mines is coordinated with other security elements, including foot and motorized or mechanized units and antitank weapons. These road blocks or mine belts are located beyond a terrain feature which denies the enemy observation and fire into the bivouac area. They also are located to reduce the number of roads into the bivouac area to a few which the antitank weapons can cover effectively. On routes which are kept open for friendly vehicles, the mines are placed in piles beside the road. A mine-laying detail is kept in readiness to lay these mines hastily across the road when warned of enemy tank approach. When the road has to be blocked, these mines are tied together in advance to save time.
 - e. During the approach march greater emphasis is placed upon clearing enemy obstacles from the roads in front of the regiment. To protect the

regiment against a tank attack in an assembly area, the antitank mine platoon may lay mines or provide men to assist the battalions in laying them (fig. 55). In this case, the mines are placed across the principal routes which might favor enemy armor. When the battalions deploy and move toward the attack, the antitank mine pla-

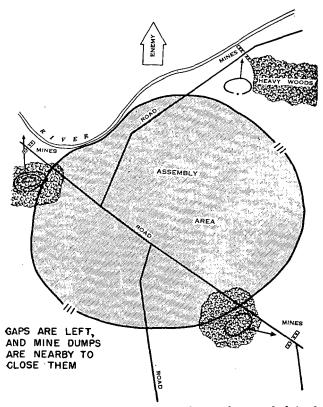


Figure 55. The antitank mine platoon lays and defends mine fields to secure the regimental assembly area.

toon recovers these mines and resumes its road clearing mission.

176. ATTACK. The antitank mine is a static weapon. During the attack its use is limited to security missions, protection of the attacker during reorganizations, defense against enemy counterattacks, and protection of command posts and assembly areas. In the attack, the antitank mine platoon is used for mine field reconnaissance, and for breaching and the deliberate removal of friendly and enemy mine fields. When not engaged in laving, defending, locating, breaching, or removing mine fields, the platoon performs pioneer missions. These include repairing and improving roads and bridges, or maintaining and protecting communication routes. However, such pioneering missions are assigned primarily to each battalion's pioneer and ammunition platoon (FM 7-20).

177. REORGANIZATION. As each objective is gained during the attack, the antitank mine platoon reorganizes. Preparations are made either to continue the attack or to defend the objective against a counterattack. The antitank mine platoon may be used to help secure the objective area against a counterattack by enemy armor, to provide antitank mine protection for the regimental command post, or to block routes leading into the assembly areas used during the reorganization. In the defense against a counterattack, antitank mines are placed hastily in a standard pattern across likely tank approaches and later, when time permits, they are buried and camouflaged. Action

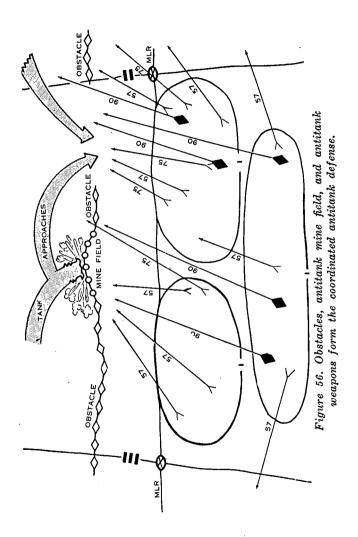
is taken to make sure that the antitank mines do not interfere with the continuation of the attack. When existing natural tank obstacles or known enemy limitations prevent the use of enemy tanks. the platoon may be assigned other missions. These missions include mine field reconnaissance and breaching, preparatory to continuing the attack: pioneer tasks to improve communication routes and to neutralize obstacles: assisting in ground security measures and preparing explosives for use in continuing the attack when the regiment is operating against prepared positions or fortifications. During each reorganization, the platoon leader contacts his squad leaders, determines his platoon's strength and combat effectiveness, makes changes in organization as are needed because of losses during the action, informs the headquarters company commander of his platoon's condition and needs, obtains information of the operation to follow, and completes his preparation for continuing the support of the attack.

178. PURSUIT. The regiment may pursue the enemy as part of the direct pressure or encircling force. When used with the direct pressure force, the antitank mine platoon reconnoiters and breaches mine fields, reduces enemy road blocks, lays mines to protect the regiment's flanks against counterattack by enemy armor, performs pioneer tasks for the improvement of routes, and disarms booby traps. When a part of the encircling force, the platoon performs the same missions, or lays antitank mines across the enemy's withdrawal route.

- 179. DEFENSE. a. The antitank mine platoon lays antitank mine fields in the defense as directed by the regimental commander. In a sustained defense, the mine fields are coordinated with the antitank defense of the battalions on the main line of resistance or are incorporated into the division mine fields. These are as extensive as the probability of enemy tank attack dictates or as the availability of mines, additional mine laying personnel, time, and the need for retaining freedom of action permit.
- b. The regimental commander may assign several missions to the antitank mine platoon as a whole, and indicate priorities; or he may assign several missions to elements of the platoon concurrently. The platoon supports the regiment in one of two ways. The bulk of the platoon is either in support under regimental control (most common use), or all or part of the platoon is attached to a battalion. When the platoon is in support, priority of work of one or more squads may be allotted to a battalion, or a list of tasks assigned to the platoon to be completed in the order of their priority. In this way, the regimental commander allocates the platoon's work where the need for unit mine fields is greatest or most immediate.
- c. Obstacles, antitank mine fields, and antitank weapons form the coordinated antitank defense (fig. 56). Antitank mine fields are located to block the most likely tank approaches to the main line of resistance. They divert enemy tanks into areas where fields of fire are best for antitank weapons; they connect natural or artificial obstacles such

as unfordable streams, heavily wooded areas, steep slopes, gullies, tank ditches; and they extend such an obstacle toward open terrain where fields of fire are good, or divert tanks from an important terrain feature whose capture would threaten the loss of the surrounding area. The proper siting of mine fields permits the covering of mine fields by small arms fire and the fire of antitank weapons. It avoids neutralizing the mine fields by the close defensive fires of friendly high explosive weapons such as artillery and mortars. Mines are not located within 50 vards of areas to be occupied by friendly troops, to prevent casualties from flying fragments of exploding mines, to prevent interference with the fire fight by concussion, and to keep the enemy tanks at greater distances from the friendly troops.

- d. The antitank mine platoon personnel may be assisted by men from the unit to which they are attached. When the number of mines to be laid requires that the battalion personnel lay mines in front of each battalion, men from the antitank mine platoon serve as technical advisers. When mine fields are laid under division control, they may be used to assist the engineer troops.
- e. The antitank mine platoon or a detachment of the platoon may be attached to the combat outpost. When attached to the combat outpost, antitank mine squads or detachments are used in the same manner as in a delaying action on successive positions.
- 180. WITHDRAWALS. a. In daylight withdrawals the antitank mine platoon is used with the cover-



ing force on the old position, with the outpost in front of the new position, and on the new position. Mines are laid across routes leading into the old position, and are covered by fire or antitank weapons and small arms until the covering force withdraws. Other units relieve the antitank mine platoon of the responsibility for protecting the mine fields. All or part of the platoon may be attached to the covering force. Mines are laid across the withdrawal route and in front of any intermediate delaying positions to be occupied by the covering force on its way to the new position. After the platoon has completed its missions in support of the covering force, it may be attached to the combat outpost of the new position. Here it also lays mines to block routes leading toward the new position. After the platoon has completed its missions in support of the combat outpost it reverts to regimental control or is attached to a battalion on the main line of resistance. Gaps are left in each mine field across a route until all friendly troops have passed through it toward the new position, or until the enemy threatens to overrun the mine field. To insure timely completion of all mine fields; two or more detachments of the antitank mine platoon may accomplish some of the above phases concurrently. They also may be assisted by other troops. In all of these phases, except when laying mines immediately in front of the main line of resistance, the antitank mine platoon operates the same as during a delaying action on successive positions (fig. 57).

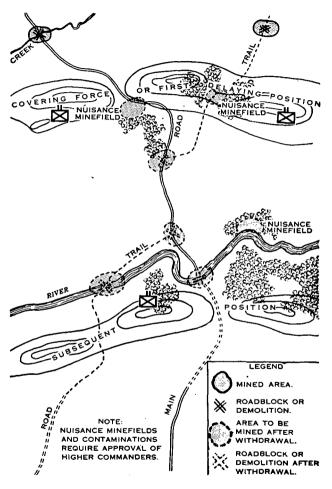


Figure 57. Typical missions of the antitank mine platoon in retrograde movements.

b. Night withdrawal is similar to daylight withdrawal in the use of the antitank mine platoon. More time is available for reconnaissance, planning, issuance of detailed orders, and for the deliberate execution of plans. Reconnaissance is made during daylight. The reconnaissance party inspects the new position and routes to it before the withdrawal. When the platoon leader accompanies the reconnaissance party, he evaluates most likely enemy tank routes along the axis of withdrawal and on the flanks. He makes recommendations to the regimental commander through the S-3 or his company commander for the locations of mine fields, and for the use of the antitank mine squads. During the withdrawal, the platoon is used to lay mine fields in front of and within the covering force position, to lay mines across roads between the covering force and the new position, particularly along the outpost line, and to assist in laying mine fields in front of the new battle position.

181. DELAYING ACTION. The use of the antitank mine platoon in a delaying action is similar to its use during a withdrawal. Every possible means is used to delay the enemy and to avoid decisive combat. Covering forces protect the main body from being interfered with, contained, outflanked, or engaged in decisive combat by the enemy. Antitank mine fields are effective when placed across routes of the enemy advance, particularly in defiles, to delay the enemy's mobile units, and to secure the flanks against tank attack (fig. 57).

Elements of the antitank mine platoon are attached to the delaying force. They may be attached to security forces on the flanks whenever the enemy is capable of using armor against the flanks, or when required for demolition and pioneer missions. Whenever time permits, the mines are buried in a standard six-row mine belt pattern and camouflaged. They are covered by the fire of small arms, automatic weapons, and antitank weapons. When specifically authorized, mines can be scattered hastily across roads and defiles and left uncovered during a withdrawal to successive positions. Whenever the decisions of higher commanders contemplate the use of persistent chemicals, the characteristics of mines favor their use along with these materials. When used after friendly small arms and antitank weapons covering these mines are withdrawn, persistent chemicals increase enemy casualties at road blocks.

182. RETIREMENT. During the withdrawal phase of a retirement, the antitank mine platoon is used as in any other withdrawal. After contact is broken and freedom of maneuver is regained, security measures are the principal consideration. The action then resembles the movement to contact. When contact is to be resumed, the platoon accomplishes its resupply and reorganization in preparation for the next operation.

183. RELIEF IN CONTACT. The antitank mine platoon leader of the relieving unit contacts the antitank mine platoon leader of the unit being re-

lieved. The relieving platoon leader makes a daylight reconnaissance of the area immediately in rear of each division mine field in the regimental sector. He also makes a reconnaissance of any unit mine fields within the sector. He inquires as to other antitank mine platoon missions assigned to the unit being relieved, and sees that he understands all details concerning them. He reports outstanding features of his mission and the location of existing mine fields to the regimental S-3 and the headquarters company commander and receives orders directing any change in missions assigned to him. He instructs the squad leaders and the platoon headquarters man in their missions. His instructions to the platoon include the time, method, and probable duration of the relief. The relieving platoon leader makes sure that the commander in whose area an element of the antitank mine platoon operates is so informed. The relief usually is made at night. Measures are taken to insure control and secrecy, and to avoid noise and confusion.

184. AIRBORNE OPERATIONS. As airborne troops in the initial phase of their assault are vulnerable to tank attack, the airborne antitank mine platoon is given a high priority of arrival in the combat area. It usually is transported to combat by glider or assault aircraft so as to have its tactical transportation and basic load of mines immediately available. Advance parties may precede the platoon by parachute to reconnoiter and to provide guides. The platoon's first missions are assigned

before launching the assault. These missions include establishing hasty road blocks and other obstructions to secure the regiment against a mechanized attack. They also include destruction of enemy antiairborne obstacles. The use of the airborne antitank mine platoon after landing corresponds to its use in each similar ground tactical situation. Small antitank mines are available for airborne units. One of these mines may be carried by each man in other units not already burdened by additional equipment. Additional mines may be assembled in dumps immediately after they are landed. When units other than the antitank mine platoon lay mines, the platoon may be required to provide men to assist these units in laving mine fields.

185. ANTIAIRBORNE DEFENSE. The organization of an area for antiairborne defense is characterized by the construction of obstacles. Some of this construction consists of obstructing likely landing areas for passive defense. During the organization of an area for antiairborne defense, the antitank mine platoon is used to assist in obstructing landing areas. The platoon either performs these missions under regimental order or provides detachments to assist the battalions in this type of work. The antitank mine platoon performs pioneer missions to repair any damage to roads or installations in the regimental area resulting from the bombing phase of the airborne attack. The platoon provides its own ground security during the defense. It is also prepared to assist the regiment in containing, isolating, or destroying the landed enemy.

186. SPECIAL OPERATIONS-ATTACK OF A FORTI-FIED LOCALITY. These operations are characterized by extensive mine field reconnaissance and breaching, and by the use of explosives and demolitions against emplacements, pillboxes, bunkers, built up areas, and underground protection used by the enemy. The antitank mine platoon accomplishes mine field reconnaissance and breaching. Division and supporting engineers are concerned primarily with providing the demolition teams. However, the antitank mine platoon may be required to provide additional men to augment the engineer teams, to operate as additional teams, or to assist the rifle units in the use of demolitons. The platoons also take part in flame-thrower training with the other regimental units, because it may use flame throwers during this type of operation.

187. SPECIAL OPERATIONS—OPERATIONS AT RIVER LINES. Operations at a river line take advantage of the fact that deep, swift, unfordable streams and rivers are formidable obstacles to tanks. In defensive operations the effectiveness of such obstacles is increased by the use of mines at natural approaches to crossing sites on the far bank, at landing areas on the near bank, and in areas where bridging equipment may be unloaded and assembled. During a river line defense the antitank mine platoon is used to deliver, lay, mark, and record mine fields. The location of these mine

fields is considered in planning defensive fires so that mines are not disturbed by friendly fires. The mines on the far bank and on the near bank are covered by automatic weapons, small-arms. and antitank weapons located on the near bank. The antitank weapon units are informed of the mine field locations so that the majority of these weapons may be concentrated to block other tank approaches. During an attack of a river line, the engineers usually reconnoiter all near shore areas in the crossing plan; the antitank mine platoon reconnoiters infantry assembly areas on the near shore and areas on the far shore as directed by the regimental commander. After a bridgehead has been gained, the platoon may be used to lay mines to secure it against enemy counterattacking tanks. The platoon, or a part of it, may be attached to an assault battalion to perform any of these tasks.

188. SPECIAL OPERATIONS - NIGHT OPERATIONS.

Night combat permits extensive use of the antitank mine platoon. The platoon is trained to reconnoiter, breach, clear, remove, lay, and record mine fields at night as well as during daylight. Mine breaching or mine laying operations may be carried out at night; even under enemy fire. Where possible, a daylight reconnaissance is made of the near side of an enemy mine field or the intended location of a friendly mine field. Antitank mine squads are trained to use the compass at night. Trip flares are used in friendly mine fields to give warning of an enemy reconnaissance

of the mine field. Friendly mine fields are protected by small arms, automatic weapons, and antitank weapons. Machine-gun final protective lines are effective in protecting friendly mine fields at night. All of these weapons are located closer to the mine field at night than during daylight. Listening posts may be stationed on the enemy side of the mine field to give timely warning of enemy reconnaissance and breaching parties.

189. SPECIAL OPERATIONS—OPERATIONS IN BUILT UP AREAS. Combat in towns demands that the antitank mine platoon be alert for the presence of antitank and antipersonnel mines. Booby traps are likely to be encountered in and around abandoned buildings. When mines and booby traps are encountered, the platoon marks or removes them. When the platoon lays mines in towns, these mines are located to deny the enemy using direct avenues through the town and to block approaches to commanding localities. The principal highways, bridges and their approaches, main through important districts, cleared routes through demolished areas, and other defiles are blocked by mines or obstacles. They are covered by small arms. automatic weapons, and antitank fire.

190. SPECIAL OPERATIONS — OPERATIONS IN WOODS. Combat in woods hampers the movement of mechanized vehicles. The use of direct-fire antitank weapons also is limited. When tanks are

used in wooded areas, antitank mines are used to block areas which cannot be covered effectively by antitank weapons. Mines are used with natural obstacles such as swampy or impassable wooded areas, and with abatis constructed with heavy logs. When reconnoitering for mines in woods, the antitank mine platoon is alert for trip wires and other types of releases attached to antipersonnel mines. Combat in woods may require pioneer missions for the platoon. These include destroying obstacles, constructing bridges, and improving roads and trails.

191. SPECIAL OPERATIONS - MOUNTAIN OPERA-TIONS. Mountain operations restrict the use of tanks. Narrow defiles such as mountain passes, saddles, and stream channels leading into mountain ranges are easier to block than open areas where either force possesses freedom of maneuver. Antitank mines are placed across these defiles. In reconnoitering for enemy mine fields in mountains, the antitank mine platoon investigates the slopes toward the enemy as well as the approaches along the near slope. When laying mines, considerations of cover and concealment, especially from the destructive effect of enemy direct and observed fire, may dictate the selection of a reverse slope position. Such a position increases surprise and permits covering the mine field by fire from organized localities along the main line of resistance. Demolitions are used to create or remove obstacles. Rock slides can be directed across approach routes by the use of explosives. Craters can be blown in critical locations where roads pass through defiles. The antitank mine platoon performs these tasks or provide the men to assist other infantry units.

192. SPECIAL OPERATIONS—OPERATIONS IN SNOW AND EXTREME COLD. Combat in snow and extreme cold often limits tank operations to special purpose armored vehicles. Smaller enemy vehicles with wider tracks and lighter armor are expected where snow is deep and relatively soft. The cushioning effect of deep snow tends to prevent mine detonation. However, after a thaw and subsequent freezing temperatures, mines can be placed on top of the resulting ice layer and covered by new snow. Mine reconnaissance is impeded by drifting snow. Because the men have to wear heavy gloves or mittens almost continuously, they are hampered in removing mines. The difficulty of locating landmarks, moving on foot, and hauling mines from the supply dumps hamper mine laying and marking. Where conditions prevent the use of armor, the antitank mine platoon is assigned demolition and pioneering missions. These include road and trail maintenance, constructing obstacles and road blocks, and blowing craters. Demolition charges can be used to shatter the ice on frozen lakes and streams to prevent enemy vehicles from passing, and to prevent enemy airborne troops from landing on these areas.

193. SPECIAL OPERATIONS — OPERATIONS AT DE-FILES. Combat in defiles lends itself to the use of mines. During the defense and during retrograde movements, the antitank mine platoon lays and defends mine fields and constructs obstacles to block the enemy at defiles. During the movement to contact and when pursuing, the platoon is used to reconnoiter, breach, remove, or destroy mine fields, or to demolish road blocks and other obstacles placed in defiles by the enemy. When authorized by higher commanders, persistent chemicals are used to hamper or prevent enemy removal of mines in defiles.

194. SPECIAL OPERATIONS - JUNGLE OPERATIONS.

Jungle terrain seldom is open enough to permit tanks to deploy and move across country. Mines are used to block the roads and trails to which tanks may be limited. The antitank mine platoon also lays mines along stream banks, across clearings in the enemy's path, and for close-in protection of friendly occupied areas. It reconnoiters similar areas and removes enemy mines. It may use demolitions to neutralize obstacles. The platoon also is assigned pioneer and demolition tasks.

195. SPECIAL OPERATIONS — DESERT OPERATIONS.

Desert operations favor the use of antitank mines. However, the number of mines required often is greater than in other types of terrain. Mine fields are more extensive because of the freedom of maneuver usually permitted to tanks in a desert. Mine fields are easier to lay in relatively fine, dry sand. Covering and camouflaging mines is not as great a problem as in grassy areas. Observation

and fields of fire are better in open terrain. Mine fields are covered by fire more easily. For the same reason mine field reconnaissance and removal during the advance of friendly forces are more difficult. These operations are more vulnerable to enemy defensive fires located to cover the enemy's mine fields. For these reasons, the antitank mine platoon operates largely at night in the desert.

196. SPECIAL OPERATIONS - AMPHIBIOUS OPERA-TIONS. Amphibious operations against enemy shores may encounter underwater mines and land mines across the approaches inland from the beach. Beach defenses by friendly forces likewise use both antitank mines and underwater mines to destroy landing craft as they approach the beach. Navy underwater demolition teams remove underwater mines before the landing of friendly forces. The antitank mine platoon makes a mine field reconnaissance of the beach above the water line. It explores exit routes from the beachhead area. It clears or breaches these areas to assist the regiment to land, unload equipment, and advance inland. Engineer troops also may be assigned such missions, or may follow the regiment and complete the clearing of mines from the beach. In a defense against an amphibious landing, the antitank mine platoon lays mines, constructs obstacles, or provides men to assist the rifle units in these tasks.

CHAPTER 6

SECURITY PLATOON

Section I. GENERAL

197. MISSION. The security platoon is the security agency for close-in protection of the regimental command post. Its strength and organization do not permit a variety of other missions while it is performing its security mission. However, the security platoon does provide a source for trained men to perform military police duties for the regiment. These duties include providing guides along march routes or in new areas to be occupied by the regiment, traffic control, prisoner of war escort, control of civilians, control of stragglers, and disciplinary control of troops. When military police missions are assigned to the security platoon, additional men may be required from other units to increase the command post security force.

198. ORGANIZATION. a. The security platoon consists of a platoon headquarters and three security squads. This unit is not authorized in tables of organization and equipment for the headquarters company, airborne infantry regiment.

- (1) The platoon headquarters consists of a platoon leader, a platoon sergeant, and drivers.
- (2) Each security squad includes a squad leader, an assistant squad leader, and riflemen.
- **b.** Transportation in the platoon headquarters moves the platoon baggage. This transportation also enables the platoon to perform limited motorized patroling for traffic control during motor marches and for other military police duties. The platoon leader and the platoon sergeant are armed with carbines. The squad members are armed with rifles. The drivers are armed with submachine guns. Rifle grenade launchers are authorized in the squad and among the drivers. Each squad has one rocket launcher for close-in antitank protection. The platoon headquarters has a .50 caliber machine gun for antiaircraft protection and ground security. This weapon can be fired from a vehicle. The platoon headquarters has soundpowered telephones for telephone communication in each squad.

199. DUTIES OF PERSONNEL, a. Platoon headquarters.

- (1) The platoon leader's duties include-
 - (a) Commanding the security platoon.
 - (b) Training, discipline, control, and tactical employment of his platoon by timely orders to his squad leaders.
 - (c) Preparing the security plan for the regimental command post and submit-

- ting it to the headquarters company commander (headquarters commandant) for approval.
- (d) Using his platoon to implement the security plan when approved.
- (e) Recommending the location of the regimental prisoner of war collecting point.
- of of the military police duties that are assigned to him by the headquarters company commander.
- (2) The platoon sergeant is second in command of the platoon. His duties include—
 - (a) Assisting the platoon leader.
 - (b) Taking charge of the platoon when the platoon leader is absent.
 - (c) Commanding the platoon rear echelon when the regimental headquarters displaces.
 - (d) Inspecting the old location for stragglers immediately before the old command post location is evacuated during a displacement.
- (3) Drivers' duties include-
 - (a) Operating the vehicles assigned to the platoon headquarters.
 - (b) Maintaining their vehicles.
 - (c) Acting as platoon motor messengers to transmit oral and written messages.
 - (d) Motor patroling during motor marches.
 - (e) Fighting, when necessary.

- (f) Operating rifle grenade launchers for close-in security and defense against mechanized attack.
- (g) Operating the .50 caliber machine gun, or any other weapon which may be mounted on their vehicles.

b. Security squad.

- (1) The squad leader's duties include-
 - (a) Commanding the security squad.
 - (b) Maintaining a high standard of training, discipline, appearance, conduct, and performance of all men in his squad.
 - (c) Using his squad as directed in the platoon leader's security plan.
 - (d) Supervising his squad members in the performance of assigned military police duties.
- (2) The assistant squad leader is second in command of the squad. His duties include—
 - (a) Assisting the squad leader in controlling the squad.
 - (b) Taking charge of the squad when the squad leader is absent.
- (3) The riflemen form the nucleus for close-in security of the command post. They are trained as guides, as guards for prisoners of war, and in handling civilians. They are trained to perform military police duties and to handle disciplinary problems, to include straggling

and disorder. Certain riflemen are armed and trained as rifle grenaders and rocket-launcher men. Selected riflemen may accompany the regimental commander on reconnaissance as bodyguards.

- 200. TRAINING. a. During basic unit training, the security platoon conducts squad and platoon training. Each squad conducts tactical exercises as a unit until all men can work together as a team. The squads then take part in platoon problems. During advanced unit training the platoon takes part in battalion and regimental field exercises in its security job and its military police duties as the regimental commander directs.
- b. Training in security work emphasizes interior guard duty, constructing emplacements and individual shelters, close-in protection against enemy armor, recognition of enemy aircraft, airborne defense, and defense against chemical attack.
- c. Military police training includes traffic control, handling prisoners of war, straggler control, civilian control, guide duties, guarding matériel, control of activity in the regimental command post and parking area, counterintelligence measures, civil disorders, and disciplinary control of troops. Assistance may be obtained from the division military police company in conducting this training.

Section II. TECHNIQUE

- **201. GENERAL.** The security platoon's operations are divided into security missions and military police duties.
- a. Security missions include close-in and outer defense of the regimental command post. The platoon leader directs these missions. The head-quarters company commander (headquarters commandant) coordinates the security platoon with the antitank mine platoon and all other men and weapons available for command post security.
- b. Military police duties include assisting and supplementing the functions of the division military police company in the regimental area of responsibility. When military police are available, but in insufficient numbers for carrying out local military police activities, men of the security platoon may be called upon to augment the military police.

202. SECURITY OF THE REGIMENTAL COMMAND POST. a. The security platoon prepares positions from which the regimental command post can be defended against attack. Air, antiairborne, and antitank guards are posted to give warning of enemy air, mechanized, or infantry attack. These guards also give the warning of a chemical attack.

b. Security within the command post is accomplished by passive measures, and by planning and rehearsing active measures. The passive measures include slit trenches or shelters for all personnel, use of available cover and concealment,

camouflage discipline, use of countersigns, and warning system. Active measures include specific security misssions for all available personnel for an emergency, the tactical disposition of weapons, and the construction of foxholes and emplacements for the defense.

c. Outer security includes road blocks, mine fields, and other obstacles, and the location of outposts across likely routes of enemy approach. The outposts are located far enough from the command post to give a timely warning to the command post. The sound-powered telephones in the platoon headquarters are used to install a warning system and to coordinate the defense during emergencies (fig. 58).

203. SECURITY DURING DISPLACEMENT. When the quartering party goes forward to select a new command post site, the security platoon leader and selected men of his platoon accompany it. The platoon leader makes a reconnaissance, assigns each squad an area of responsibility, and posts guards and guides. He remains at the new location, leaving the platoon sergeant and the remainder of the platoon at the old command post until it closes. The old command post is inspected to prevent leaving information for the enemy, and to correct any unsanitary conditions. The sergeant sees that no unauthorized person remains in the old command post area. Upon completion of his inspection, he leads the remainder of the platoon to the new command post. One man of the platoon remains as long as necessary to direct authorized

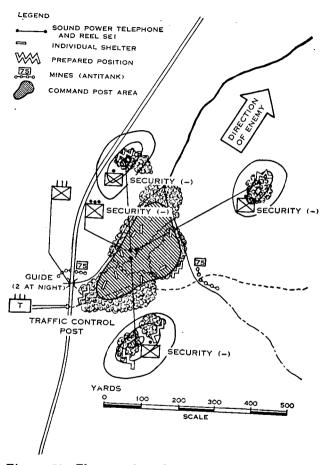


Figure 58. The security platoon may provide guides, operate traffic control posts, and man defenses for the regimental command post.

persons to the new command post. Platoon members who are not used in security work during the displacement assist in setting up the new command post and act as guides.

204. SECURITY IN BIVOUAC AND ASSEMBLY AREAS.

In bivouac, the security platoon provides for the interior defense of the regimental command post in the same way as when the regiment is in contact with the enemy. (fig. 58). The nearness of other regimental units may relieve the security platoon from providing the outer security defense. Guards are posted for air, antiairborne, and antimechanized warning within the command post. However, as the battalions move out of their assembly areas, the security platoon assumes responsibility for outer security and warning systems for the command post.

205. SECURITY ROLE DURING MOVES AND MARCHES.

Security of the march column is provided by advance, rear, and flank guards composed of other regimental units. During foot marches the security platoon may provide local security for the regimental staff and the regimental headquarters company. When the regimental command post moves, the security platoon may provide the guides.

206. TRAFFIC CONTROL. The security platoon provides men for traffic control within the regimental area of responsibility. When security platoon members are used for traffic control, their duties include—

- a. Regulating the traffic flow at intersections, defiles, and in the vicinity of the regimental command post.
- **b.** Providing route information to friendly troops.
 - c. Enforcing traffic regulations.

207. CONTROL OF CIVILIANS. The security platoon assists military government or civil affairs personnel or military police in controlling civilians within the regimental area of responsibility to prevent the congestion of routes. When civil affairs or military government personnel or military police are not available, the security platoon performs these missions under the regimental S-1's supervision. For military control of civilians, see FM 19-5.

Section III. TACTICAL EMPLOYMENT

208. GENERAL. The security platoon is used primarily for close-in and outer security of the regimental command post. However, when necessary and when possible within its over-all capabilities, it also performs military police duties.

209. MOVEMENT TO CONTACT. During route column and tactical column, the security platoon provides guides, and assists in traffic control along the regiment's march route. During the approach march, the platoon provides the security in the command post between displacements, and provides guides during each displacement. Guides are

picked up and displaced forward by truck after the column has passed.

- 210. ATTACK. When the attack is launched from the march, the security platoon establishes close-in and outer security as soon as the command post halts. When the attack is launched from a regimental assembly area, the security platoon maintains security within the command post, and establishes outer security as the battalions move out of the assembly area. The platoon is responsible for command post antiaircraft, antitank, antiairborne, and gas warning systems during all phases of the attack.
- 211. REORGANIZATION. The regimental command post may displace forward during a regimental reorganization to be closer to the subsequent action. A portion of the security platoon may be used to assist in apprehending stragglers, in relieving front line units of prisoners taken during the attack, or in controlling traffic as the command post and administrative installations are displaced forward. When the command post displaces forward, security platoon members are used as guides in the new location, and as local security while the command post is divided into two echelons. To prevent surprise by enemy counterattacks, the platoon leader keeps himself advised of the enemy situation.
- 212. PURSUIT. The security platoon works the same way during a pursuit as during an attack.

However, the command post may displace more frequently. During a pursuit the enemy is usually disorganized, and prisoners of war may be taken in larger numbers. Therefore, police duties to include prisoners of war escort and traffic control frequently are assigned to a portion of the platoon.

213. DEFENSE. In defensive operations command posts are farther to the rear than in the attack. However, enemy patrols may be more active. Security considerations require extensive measures for the defense against ground infiltration and mechanized raids. The enemy may possess air superiority in any area where friendly forces are compelled to assume a defensive attitude. Warning systems are planned and rehearsed. Passive measures are taken to protect the men in the command post from observation and fire (par. 202). In the defense, the bulk of the security platoon provides outer security for the command post.

214. WITHDRAWALS, DELAYING ACTION, AND RETIREMENTS. Wider frontages in delaying action require more elaborate plans for security in the command post, and limit the platoon's use on other missions. In other retrograde movements, the bulk of the command post displaces to the rear early in the operation, leaving only a minimum of men and equipment for communication and control. The major portion of the platoon accompanies the command post to the rear. When security missions do not involve the entire platoon, part of it

is used for traffic control and the collection of stragglers after it leaves the old position.

215. RELIEF IN CONTACT. Before the relief begins. the security platoon leader of the relieving regiment visits the command post of the regiment being relieved. He studies the command post security plan with the security platoon leader being relieved. He makes a reconnaissance of close and outer security positions. He determines the number of guides and guards used during daylight and darkness. He makes notes of warning plans. warning signals, and communication facilities used. He advises the headquarters company commander (headquarters commandant) of these details and recommends any additional security measures he considers necessary. When the platoon is called on for guides, the platoon leader selects well qualified men. Each guide is conducted over his route, and is familiarized with his mission. During the relief, the platoon leader verifies that all men are at their assigned locations. When his platoon assumes responsibility for the defense of the command post, he notifies the leader of the unit being relieved. The incoming platoon may receive prisoners held by the unit being relieved, or assist in traffic control for the departing regiment. Stragglers belonging to the departing unit are sent to the rear along previously selected straggler routes.

216. AIRBORNE OPERATIONS. The headquarters company, airborne infantry regiment, does not

have a security platoon. However, an infantry regiment may be transported by air to its area of operations. The security platoon travels in the same serial with the advance echelon of the regimental command post. For its operations after landing, see the appropriate tactical situation described in this chapter.

- 217. ANTIAIRBORNE DEFENSE. The security platoon provides close-in security for the regimental command post. Warning systems are prepared during the planning phase. The platoon rehearses its defense missions. It provides guides or assists in traffic control during the movement of the mobile striking forces.
- **218. SPECIAL OPERATIONS.** a. During an *attack of a fortified locality*, the security platoon functions as in any coordinated attack.
- **b.** During operations at river lines the security platoon is used as described for the defense and the attack, depending upon the tactical situation.
- c. In *night combat* the bulk of the security platoon provides security for the command post. Listening posts and reconnaissance patrols replace the observation posts established during daylight. The men are assigned to reliefs and sleep in their positions when off duty to insure continuous operation and the availability of all men during emergencies.
- d. In combat in towns buildings frequently are used for command post locations. The security platoon investigates these buildings, clears out

enemy troops and civilians, and checks for booby traps. Security measures take advantage of buildings for observation. Cellars and masonry are used for protection against enemy ground fire and aerial bombardment. The platoon also may provide men for traffic and civilian control.

- e. Other special operations include combat in woods, mountain operations, combat in snow and extreme cold, combat in defiles, jungle operations, desert operations, and amphibious operations. Their influence on the security platoon differs only in the terrain and weather from the other situations already discussed.
 - (1) Less observation exists in woods, therefore outer security groups are closer together, and patrols are used to maintain contact.
 - (2) Movement is more tedious in mountain operations but observation is better. The command posts displace less frequently. In the use of the security platoon during offensive combat in mountains, priority is given to close-in security of the command post to prevent interference by enemy units which may infiltrate from open flanks.
 - (3) Special training in patroling is necessary for operations in snow and extreme cold. Landmarks are more difficult to identify, and more guides are necessary.
 - (4) Combat at defiles uses narrower frontages and greater depth. The command posts are farther to the rear, and there

are fewer routes to be covered by security posts. During operations in snow and extreme cold, undefended gaps may exist in front lines and on open flanks. Allaround defense of the command post by elements of the security platoon, during these operations, usually requires that the bulk of the platoon be used for close-in security.

- (5) Jungle operations are similar to combat in woods. Movement is laborious and slow, especially off roads and trails.
- (6) Desert operations are characterized by long range observation. The terrain conditions favor enemy mechanized raiding parties against the command post.
- (7) In amphibious operations, the security platoon may be used, initially, for traffic control in the beachhead or to guide command post personnel to the command post location. After the advance has progressed inland from the beachhead and the command post can displace forward, the platoon is used as in any other offensive operation.

APPENDIX I

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	Headquarters Company, Infantry
Tables of Basic	Regiment. Additional equipment
Allowances	and supplies.
FM 7–20	Infantry Battalion.
FM 7-30	Service and Medical
	Companies, Infan-
•	try Regiment.
FM 7-40	Infantry Rifle Regi-
	ment.
FM 20-100	Army Ground Forces
	Light Aviation.
FM 21-5	Military Training.
FM 21-8	Military Training
	Aids.
TM 21-250	Army Instructions.
FM 100-10	Administration.
FM 101-5	Staff and Combat
77.5	Orders.
FM 101–10	Logistical Data.
SR 110-1-1	Index of Army Mo-
•	tion Pictures and
	Film Strips.

6.

REFERENCES FOR CHAPTER	2.
FM 6-20	Field Artillery Tac-
FM 6-40	tics and Technique. Field Artillery Gun-
FM 6-101	nery. Field Artillery Tactics and Technique

	Battalion and Bat-
	tery, Motorized.
FM 6-130	Field Artillery Intelligence.
FM 7-15	81-mm Mortar Pla- toon, Heavy Weap- ons Company.
FM 7-37	Heavy Mortar Com- pany, Infantry Regiment.
TM 11-2552	Sound Locating Equipment, GR-6.
FM 30-10	Intelligence, Observation.
FM 100-5	Operations.

7. REFERENCES FOR CHAPTER 3.

CCBP 3-2	Radiotelephone Procedure.
FM 7-24	Communication in the Infantry Division.
FM 24-6	Radiotelegraph Procedure.
FM 24-16	Signal Orders, Records and Reports.
FM 24-17	Message Center Procedure.
FM 24-18	Radio Communica- tion.
FM 24-20	Field Wire Technique.

FM 100-5	Operation
JANAP 131	Radioteleg

Radiotelegraph Procedure.

8. REFERENCES FOR CHAPTER 4.

FM 2-20	Motorized Patroling.
FM 21-75	Scouting, Patroling, and Sniping.
FM 30-5	Combat Intelligence.
FM 30-10	Military Intelligence, Observation.
FM 30-15	Examination of Enemy Personnel, Repatriates, Civilians, Documents, and Matériel.
FM 30-21	Aerial Photography in Combat Intelli- gence.
FM 30-25	Counterintelligence.
TM 30-215	Counterintelligence.
FM 100-5	Operations.

9. REFERENCES FOR CHAPTER 5.

FM 5-10	Routes of Communi-
	cation.
FM 5-15	Field Fortifications.
FM 5-25	Explosive and Demo-
	litions.
FM 5-31	Land Mine Warfare.
FM 5-34	Engineer Field Data

FM 5-35 Engineer Reference

Data.

FM 7-35 Tank Company, In-

fantry Regiment.

FM 21-105 Engineer Soldier's

Handbook.

FM 100-5 Operations.

10. REFERENCES FOR CHAPTER 6.

FM 19-5 Military Police. FM 100-5 Operations.

APPENDIX II

TACTICAL TRAINING (BASIC UNIT TRAINING)

Section I. COMPANY HEADQUARTERS, REGIMENTAL HEADQUARTERS SECTION, AND COMMUNICATION PLATOON

1. TRAINING SCHEDULE.

Total hours, airborne infantry units, 69 Total hours, infantry units, 65

Period	Period Hours	Lessons	Text references	Area	Training aids and equipment
 	6 _	Movement to contact. (Conference 1 hr.; field exercises 8 hrs.)	Par. 102.	Classroom and appropri- ate terrain.	For instructor: blackboard, charts, and maps or aerial photographs. For student: notebook, pencil, organizational equipment, maps or aerial photographs, and
2	7	Attack. (Conference 1 hr.;	Par. 103.	do.	Do.

field exercises 6

1. TRAINING SCHEDULE. (Continued)

Training aids and equipment	For instructor: blackboard and charts. For student: notebook and pencil.	For instructor: blackboard, charts, and maps or aerial photographs. For student: notebook, pencil, or- ganizational equip- ment, maps or aerial photographs and message book.	Same as 1st period.
Area	Classroom.	Classroom and appropri- ate terrain.	Classroom and appropri- ate terrain.
Text references	Par. 104.	Par. 105.	Par. 106.
Lessons	Reorganization. (Conference 1 hr.)	Pursuit. (Conference 1 hr.; field exercises 3 hrs.)	Defense. (Conference 1 hr.: field exercises 5 hrs.)
Hours	н	4	9
Period	က	4	ರ

Same as 1st period.	Same as 1st period.	Same as 3d period.	For instructor: blackboard, charts, and maps or aerial photographs. For student: notebook, pencil, or- ganizational equip- ment, maps or aerial photographs, and message book.
do.	do.	Classroom.	Classroom and appropri- ate terrain.
Par. 107.	Par. 108.	Par. 109.	Par. 110.
Withdrawals. (Conference 1 hr.; field exercises 7 hrs.)	Delaying action. (Conference 1 hr.; field exercises 5 hrs.)	Retirement. (Conference 1 hr.)	Relief in contact. (Conference 1 hr.; field exercises 3 hrs.)
∞	9	1	4
9	7	∞	တ

1. TRAINING SCHEDULE. (Continued)

Training aids and equipment	For instructor: blackboard, charts, maps or aerial photographs, and aerial delivery equipment. For student: notebook, pencil, organizational equipment, maps or aerial photographs, and message book.	Same as 1st period.	For instructor: blackboard and charts. For student: notebook and pencil.
Area	Classroom and appropri- ate terrain.	do.	Classroom.
Text references	Par. 111.	Par. 112.	Pars. 113, 114.
Lessons	Airborne operations. (Conference 1 hr.; field exercises 3 hrs.)	Antiairborne defense. (Conference 1 hr.; field exercises 3 hrs.)	Attack of a fortified locality. (Conference 1 hr.)
Hours	* 4	₹	-
Period	10	11	12

For instructor: blackboard, charts, maps or aerial photographs, and engineer bridging or boat equipment. For student: notebook, pencil, organizational equipment, maps or aerial photographs, and message book.	For student: organizational equipment, maps or aerial photographs, and message book.	Same as 12th period.
Classrocm and appropri- ate terrain.	Pars. 113, 116. Appropriate terrain.	Classroom.
Pars. 113, 115.	Pars. 113, 116.	Pars. 113, 117-
Operations at a river lars. 113, 115. Classrocm line. (Conference 1 hr.; field exercises 7 hrs.)	Night combat. (Field exercises 4 hrs.)	Other special operations. (Conference 2 hrs.)
∞	4	63
133	14	15

*For airborne infantry units only.

2. MOVEMENT TO CONTACT (FIRST PERIOD).

TACTICAL COLUMN

Scope

A problem involving the company headquarters, the regimental headquarters section, and the communication platoon in tactical column.

a. Organization of the column by the head-The situation is drawn to require—

b. Specifying the means of communication to be used in the column by the communication plaquarters company commander. toon leader.

c. Sending and receiving messages on the march. d. Supervision of communication means by the communication platoon leader.

e. Functioning of company and regimental headquarters section personnel.

APPROACH MARCH

ters, the regimental headquarters section, and the communication platoon in the approach A problem involving the company headquar-

The headquarters company commander issues ments of the regimental headquarters section, the company headquarters, and the communicaorders and assigns places in the column for ele-Standard procedure

The men perform their normal duties during the march.

tion platoon.

The communication platoon maintains communication during the march. Messages are sent and received. A few messages are encoded and decoded.

The communications means used include radio, messenger, and visual. The headquarters company commander and communication platoon leader reconnoiter in advance of the column for command post locations.

The situation is drawn to require-

a. Selection of march command posts along the axis of advance, issuance of orders to the company headquarters, and coordination with members of the regimental headquarters company commander.

b. Arrangement of communication means in march command posts by the communication platoon leader.

c. Supervision of platoon operations by the platoon leader.

d. Sending and receiving messages.

3. ATTACK (SECOND PERIOD).

A problem involving the company headquarters, the regimental headquarters section, and the communication platoon in the assembly area

The situation is drawn to require-

for an attack.

a. Orders by the headquarters company commander to include dispositions in the command

The company commander designates areas for staff locations in the command post. Members of the regimental headquarters section practice normal operations in the command post on the march.

The communication platoon leader directs the installation of means of communication in the command post.

He supervises the platoon operations.

Messages are sent and received. Other reginental units are represented by headquarters company radios.

PREPARATION IN ASSEMBLY AREA

The headquarters company commander and communication platoon leader select and plan the command post organization.

The communication platoon leader plans the

mand post area.

He issues orders to establish the communication means. Higher and supporting units are

represented by messages.

disposition of platoon activities within the com-

Scope

b. Decisions as to distances between installations and communication means to be used.c. Supervision of communication means by

the platoon leader.

d. Measures for secrecy and counterintellience.e. Selecting and occupying the command post,

and installing wire lines.

A STO MOINTING WE

A problem involving the company headquarters, the regimental headquarters section, and the communication platoon in the attack.

The situation is drawn to require—

a. Extending the communication means estab-

- lished during the preceding period.

 b. Selection of a new command post by the headquarters company commander and the communication platoon leader.
- c. Orders for a displacement to be issued by the headquarters company commander and the communication platoon leader.
- d. Supervising the displacement and install-

Standard procedure

Messenger communication is emphasized. Regimental headquarters section simulates continuous staff operation.

One wire line is laid to each battalion and other regimental units.

EXECUTION OF ATTACK

The headquarters company commander lays out elements of the command post according to a plan. The communication platoon leader arranges the elements of his platoon.

The command post displaces while communication facilities and staff operations continue to function.

Wire lines are installed to support the attack. Battalions and other units are represented by

lines and by messages.

Messages are received and sent before, during, and after the displacement. A few messages are received in the old location and relayed to the

ing communication for the attack.

e. Handling messages before, during, and after the displacement.

4. PURSUIT (FOURTH PERIOD).

A problem involving the company headquarters, the regimental headquarters section, and the communication platoon in a pursuit.

The situation is drawn to require: a. Plans by the communication platoon leader

to maintain communication with the direct pressure force and the encircling force.

b. Selection of command posts by the headquarters company commander and communication platoon leader along the route of the direct

pressure force.

c. Displacement of the command post, and maintenance of continuous and effective communication.

d. Maximum use of radio.

5. DEFENSE (FIFTH PERIOD).

A problem involving the company headquarters, the regimental headquarters section, and

new location.

The communication platoon leader makes a communication plan to insure continuous communication with both the direct pressure force and the encircling force.

The headquarters company commander and the communication platoon leader select command post sites along the pursuit route.

Battalions and other units are represented by appropriate means of communication and by messages.

Messages are handled before, during, and after each displacement. Installation and operation of all activities in each command post location is realistically conducted and supervised.

The headquarters company commander and the communication platoon leader select, and

Scope

the communication platoon in the defense.

The situation is drawn to require—

 α . Selection and establishment of the regimental command post. Selection of locations for the battalion command posts.

b. Installation of activities in the regimental command post. Each activity to be dug in and concealed or camouflaged for sustained defense.

c. Plans for wire and radio circuits and messenger schedules by the communication platoon

d. Organization of the communication means by the communication platoon leader.

e. Laying wire lines to the combat outpost, to the observation posts, to the battalions, and to the other regimental units. Supporting units to be represented by wire lines, radio circuits, and messages.

f. Messages to represent the withdrawal of the covering force, the general outpost, and the combat outpost. Messages also to represent the conduct of the defense and the counterattack.

g. Feeding two meals on position.

Standard procedure

supervise the occupation of the regimental command post.

The communication platoon leader selects, and prepares recommendations for, battalion command post locations. He issues orders and supervises the installation of communication means. The men dig individual shelters and emplacements for office and communication equipment. Radio silence is imposed until after the combat outpost withdraws.

Two-way communication is maintained between the regimental command post and the following: the combat outpost, the battalions, the observation posts, the intelligence and reconnaissance platoon, other units in the regiment, and the higher and supporting units. These agencies are represented by wire and radio circuits and by messages.

The kitchen, operating from the train bivouac, serves two meals on the position.

6. WITHDRAWAL (SIXTH PERIOD).

A problem involving the company headquarters, the regimental headquarters section, and the communication platoon in a night with-

a. Establishment in a defensive area. The situation is drawn to require-

b. Reconnaissance of the new defensive posi-

tion and selection of the new command post by the headquarters company commander and the communication platoon leader. Reconnaissance of the route of withdrawal.

c. Displacement of the command post to the

d. Maintenance of appropriate means of comrear during darkness.

e. Establishment of all means on the new munication during the withdrawal. position. f. Handling of messages before, during, and after displacement.

The headquarters company commander and communication platoon leader supervise the installation of company and regimental headquarters section activities in the defensive position. The communication platoon leader establishes communication means.

The headquarters company commander and the platoon leader go to the new position during daylight, select the new command post location, and reconnoiter the route to it.

The platoon leader plans the communication for the withdrawal.

He supervises the handling of messages during the displacement.

He sees that secrecy is maintained, and he provides for continuation of normal communication traffic at the old position.

7. DELAYING ACTION (SEVENTH PERIOD).

Scope

A problem involving the company headquarters, the regimental headquarters section, and the communication platoon in a delaying action. The situation is drawn to require—

a. Movement to and occupation of the command post on the first delaying position.

b. Selection of the command post on subsequent positions by the headquarters company commander and platoon leader.

c. Installation of means of communication in each command post location, and to units.

d. Handling messages by all means of communication on each position and during each withdrawal.

8. RELIEF IN CONTACT (NINTH PERIOD).

A problem involving the company headquarters, the regimental headquarters section, and the communication platoon in a night relief.

The situation is drawn to require a. Reconnaissance of the new command post

Standard procedure

The headquarters company commander and the communication platoon leader select command post locations on the successive delaying positions.

The platoon leader arranges communication means within each command post. He issues orders covering means to be installed to units of the regiment. One wire line is installed to each battalion and to the covering force.

Radio silence is maintained on each position until its covering force has been driven in.

Messages are sent and received during all phases of the problem.

The headquarters company commander and the communication platoon leader visit the command post of the unit being relieved before the actual relief.

They study the arrangement of facilities in

by the headquarters company commander and the communication platoon leader during day-

b. Representation of key personnel of the unit being relieved.

c. Coordination with key personnel of the unit commander and the communication platoon being relieved by the headquarters company leader.

d. Arrangements for guides to be conducted over the route.

e. Supervision by the headquarters company commander over the movement into the command post during darkness.

f. Taking over the means of communication. g. Measures to insure secrecy. h. Notification of commanders when the relief is completed.

i. Handling messages before, during, and after the relief.

9. AIRBORNE OPERATIONS (TENTH PERIOD) (for airborne infantry units only).

ters, the regimental headquarters section, and A problem involving the company headquar-

the command post and coordinate with key men

guides to be conducted over the route to be of the unit being relieved. They arrange for followed during the relief.

The communication plateon leader takes notes of the communication plan. He issues orders for the movement and installation of communication means in the new location. The headquarters

company commander issues orders for the dis-The communication platoon leader covers secrecy measures in the communication plan. placement, and he supervises the move.

The move is conducted quietly and quickly with all men moving into their assigned locations rapidly.

Messages are handled during all phases of the problem. Other units are represented by dummy wire and radio circuits and by messages.

pares a staging and loading plan. He makes a The headquarters company commander prethe communication platoon of an airborne infantry regiment in airborne operations.

The situation is drawn to require-

- a. Detailed planning of the loading of command post elements and their delivery in the drop and landing zones.
- b. Publishing instructions and issuing orders for loading and assembling by the headquarters company commander.
- c. Planning and supervising the establishment of necessary communication facilities in the staging area and loading area by the communication platoon leader.
 - d. Assembling the communication platoon in the landing area and supervising rapid establishment of communication by the communication platoon leader.
 - e. Supervising the organization of the command post by the headquarters company commander.
- f. Handling of messages in the staging area, loading area, and objective area.
 - g. Use of troop carrier aircraft, or simulated landings on the objective using trucks.

Standard procedure

reconnaissance and selects the command post. He publishes instructions and issues orders to facilitate assembly and communication in the objective area. He supervises loading and exercises aggressive control over the assembly after landing.

The communication platoon leader prepares two plans—one for communication in the staging and loading areas, and the other for initial communication on the objective.

In these plans he includes measures to insure secrecy and signal security.

He supervises loading of the elements of his platoon. He assembles his platoon in the landing area and leads it to the command post. He supervises installation of the means of communication in the command post.

Other units are represented.

Messages are handled in the staging and loading areas and on the objective.

The use of pathfinders may also be a part of this exercise.

10. ANTIAIRBORNE DEFENSE (ELEVENTH PERIOD).

A problem involving the company headquarters, the regimental headquarters section, and the communication platoon in the defense against airborne operations.

The situation is drawn to require-

- a. Reconnaissance of the command post and plans for its organization by the headquarters company commander and the communication platoon leader.
- b. Reconnaissance of routes to probable landing areas and establishment of communication to observation post overlooking these areas. Security measures.
- c. Communication plans to support various counterattack plans.
- d. Handling of messages during the prelanding phase, during the landing, during the airborne buildup, and during the regimental counterattack.
- e. The airborne force to be represented by messages.

f. Friendly and lower units to be represented by wire and radio installation.

The headquarters company commander and the communication platoon leader select a command post based on the regimental disposition and plan of defense. The communication platoon leader reconnoiters the command post and routes to other units. He plans the location of communication agencies in the command post. He plans the establishment of communication means to battalions and other units. He plans communication to support the regimental defense plan. The headquarters company commander and communication platoon leader supervise occupation of the command post. The platoon leader supervises installation of communication and handling of messages.

Wire lines are patroled to prevent interference by the airborne force.

Warning systems are established and rehearsed. Messages are handled during all phases of the problem.

11. OPERATIONS AT A RIVER LINE (THIRTEENTH PERIOD).

ATTACK OF A RIVER LINE

Sco

A problem involving the company headquarters, the regimental headquarters section, and the communication platoon in the attack of a river line.

The situation is drawn to requirea. Reconnaissance and installation of com-

mand posts along the route to the near bank.

b. Occupation of command posts along the approach to the river and in the final assembly area.

c. Issue of orders for the crossing by the headquarters company commander and the communication platoon leader.

d. Displacement of the command post across the river by echelon.

e. Establishment of the command post and handling of messages on the far bank,

all phases of the problem.

f. Forward displacement from the initial bridgehead.

1

Standard procedure

The headquarters company commander and the communication platoon leader reconnoiter command post locations before each displace-

The platoon leader plans for communication before, during, and after the crossing. He makes sure that secrecy is enforced.

ment.

The headquarters company commander coordinates all command post activities, and supervises the installation and displacement of these

activities.

The platoon leader supervises the installation of communication means and handling of messages. Other units are represented by wire lines and radio stations. Messages are handled during

DEFENSE OF A RIVER LINE

A problem involving the company headquarters, the regimental headquarters section, and the communication platoon in the defense of a river line.

The situation is drawn to require—
a. Occupation of the regimental command post. Selection of command posts for battalions on a broad front.

b. Installation of communication means from the command post to battalions, to the covering force, and outposts on the far bank.

c. Installation of wire lines to observation

d. Supervision of activities in the command post by the headquarters company commander.

e. Supervision of communication operations by the platoon leader.

f. Handling of messages during the with-drawal of the covering force and outposts, during the conduct of defense, and during local counterattacks against hostile attempts to cross.

g. Communication during the regimental

The headquarters company commander directs activities in the command post and supervises their installation.

The communication platoon leader reconnoiters routes to battalions and to elements of the security echelon on the far bank. He supervises installation of the means of communication to these units. Units are represented by wire and radio circuits and by messages.

Messages are handled during the organization of the position, during the withdrawal of the covering force, general and combat outposts, during the conduct of defense, and during conduct of counterattacks.

Radio silence is maintained in the battle position until the enemy actually commits himself as to crossing sites.

Radio messages with the covering force are handled.

Wire is laid to outposts and to observation posts.

Messages are handled during all phases of the problem.

counterattack.

12. NIGHT COMBAT (FOURTEENTH PERIOD).

Scope

A problem involving the company headquarters, the regimental headquarters section, and the communication platoon in a night exercise.

The situation is drawn to require-

- a. Reconnaissance of a command post location at night.
- b. Movement into a position. Organization of the command post for continuous operation and for defense.
- c. Supervision of installation of all command post activities by the headquarters company commander. Orders to be issued by him to insure security. Establishment of a warning
- d. Establishing guides to assist command post personnel to find their way about the area until davlight.
- daylight.

 e. Laying out and supervising the installation st of the means of communication by the communication and the manner.

Standard procedure

The headquarters company commander and the communication platoon leader select the command post location and arrange activities within it.

The company commander informs the communication platoon leader of the command post layout.

The communication platoon leader provides guides to direct personnel to their assigned locations.

He supervises installation of activities in the command post area.

He issues orders for the installation of communication means.

He supervises their installation and sees that communication is established promptly to battalions and other units. The units are represented by wire lines and radio stations.

He arranges for security for wire teams. Messages are handled during the movement

Measures are taken to establish a warning into position and throughout the night. system and to insure secrecy. f. Laying wire lines at night to battalions and other regimental units, and opening and operating radio nets.

g. Handling messages during the movement into position and during the occupation of the command post.

Section II. COUNTERFIRE PLATOON

13. TRAINING SCHEDULE.

Total hours, infantry units, 59 Total hours, airborne infantry units, 63

Training aids and equipment	For instructor: blackboard, charts, maps, sound and flash simulators or TNT. For student: notebook, pencil, maps, organizational equipment, and blank ammunition.
Area	Classroom and appropri- ate terrain.
Text references	Pars. 49, 50.
Lessons	Movement to contact. (Conference 1 hr; motor march 1 hr; foot march and field exercise 4 hrs.)
Hours	O
Period Hours	-

13. TRAINING SCHEDULE. (Continued)

Training aids and equipment	For instructor: blackboard, charts, sandtable, maps or aerial photographs, soundand flash simu- lators or TNT. For student and demon- stration troops: notebook, pencil, maps or aerial photo- graphs, organiza- tional equipment, and blank ammuni-	For instructor: blackboard, charts, and sandtable. For student: notebook and pencil.
Area	ф	Classroom.
Text references	Pars. 49, 51.	Pars. 49, 52.
Lessons	Attack. (Conference 1 hr; demonstration 1 hr; field exercise 4 hrs.)	Reorganization. (Conference 1 hr.)
Hours		H
Period	Ø	က

4	=	Pursuit. (Conference 1 hr.)	Pars. 49, 53.	ор	For instructor: blackboard, charts, sandtable, and maps. For student: notebook, pencil, and maps.
re	∞	Defense. (Conference 2 hrs; demonstration 1 hr; tactical walk 2 hrs; field exercise 3 hrs.)	Pars. 49, 54.	Classroom and appropri- ate terrain.	For instructor: blackboard, charts, sandtable, maps or aerial photographs, sound and flash simulators or TNT. For student and demon- stration troops: organizational equipment, and blank ammunition.
9	7	Withdrawal. (Conference 1 hr; night exercise 3 hrs.)	Pars. 49, 55.	do	For instructor: blackboard, charts, sandtable, maps or aerial photographs, sound and flash simulators or TNT.

13. TRAINING SCHEDULE. (Continued)

Training aids and equipment	For student: notebook, pencil, maps or aerial photo- graphs, organiza- tional equipment, and blank ammuni- tion.	For instructor: blackboard, charts, sandtable, maps or aerial protographs, sound and flash simulators or TNT. For student: notebook, pencil, maps or aerial photo- graphs, organiza- tional equipment, and blank ammuni-
Area		Classroom and appropri- ate terrain.
Text references		Pars. 49, 56.
Lessons		Delaying action. (Conference 1 hr; field exercise 5 hrs.)
Hours		ပ
Period		t-

For instructor: blackboard, charts, sandtable, and maps or aerial photo- graphs. For student: notebook, pencil, and maps or aerial pho- tographs.	For instructor: blackboard, charts, sandtable, maps or aerial photographs, soundand flash simu- lators or TNT. For student: notebook, pencil, maps or aerial photo- graphs, organiza- tional equipment, and blank ammuni-
Classroom.	Classroom and appropri- ate terrain.
Pars. 49, 57.	Pars. 49, 58.
Retirement. (Conference 1 hr.)	Relief in contact. (Conference 1 hr; tactical walk 1 hr; night exercise 2 hrs.)
11	4
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Training aids and equipment	For instructor: blackboard, charts, maps or aerial photographs, sound and flash simulators or TNY, and aerial delivery containers for organizational equipment. For student: notebook, pencil, maps, or aerial photographs (organizational equipment to be delignment)	area by instructor.) For instructor: blackboard, charts, sandtable, and maps or aerial photo- graphs. For student: notebook, pencil, and maps or aerial pho- tographs.
Area	Classroom and appropri- ate terrain.	ор
Text references	Pars. 49, 59.	Pars. 49, 60.
Lessons	Airborne operations. (Conference 1 hr; orientation 2 hrs; field exercise 1 hr.)	Antiairborne defense. (Conference 1 hr; tactical walk 2 hrs.)
Hours	*	က
Period	9.	::

12	H	Attack of a fortified Pars. 49, 61. position. (Conference 1 hr.)		Classroom.	Do
13	L	Operations at a river line. (Conference 1 hr; field exercises 6 hrs.)	Pars. 49, 62.	Classroom and appropri- ate terrain.	For instructor: blackboard, charts, sandtable, maps or aerial photographs, sound and flash simu- lators or TNT, and boats or engineer bridging. For student: notebook, pencil, maps or aerial photo- graphs, organiza- tional equipment, and blank ammuni- tion.
14	ਚ	Night combat. (Night exercise 4 hrs.)	Pars. 49, 63.	Appropriate terrain.	For instructor: map or acrial photograph, sound and flash simulators or TNT. For student: map or acrial photograph or ganizational equipment,
For air	borne	For airborne infantry units only.	-		and plank ammunition.

TRAI	
3	1
33	6

	Training aids and equipment	For instructor: blackboard and charts.	For student: notebook and pencil.	For instructor: blackboard, charts,	maps or aerial pho-	tographs, sound and	TNT.	For student:	notebook, pencil, or-	ganizational equip-	ment, and maps or	aerial photographs.	For instructor:	blackboard, charts,	and maps or aerial	photographs.	For student:	notebook, pencil, and	maps or aerial pho-	tographs.
	Area	Classroom.		Classroom and appropri-	ate terrain.								Classroom.							
ned)	Text references	Pars. 49, 64.		Pars. 49, 65.									Pars. 49, 66-	71.						
13. TRAINING SCHEDULE. (Continued)	Lessons	Combat in towns. (Conference 1 hr.)		Combat in woods. (Conference 1 hr;	field exercise 2 hrs.)								Other special opera-	tions.	(Conference 3 hrs.)					
AINING	Hours	1		က									က		_					
13. TR	Period	15		16									17							

14. MOVEMENT TO CONTACT (FIRST PERIOD).

cope

A problem involving the counterfire platoon in the approach march.

The situation is drawn to require—

a. Issue of orders and arrangement of counterfire information by the plantoon leader. Displacement of squads by echelon.

b. Locating enemy weapons from suspect locations by squads.

c. Use of squads in immediate and close association.

d. Coordination with one or more battalions and counterfire weapons.

15. ATTACK (SECOND PERIOD).

A problem involving the counterfire platoon in the attack.

The situation is drawn to require—

a. Decisions for employment. Issuance of orders and supervision of installation, survey, and sound locating by the platoon leader.

b. Use of two sections of three teams each.

Standard procedure

The platoon leader makes a counterfire information plan.

He arranges the platoon on the road. He issues orders and exercises supervision as squads displace by echelon.

He notifies the squads of the suspected location of enemy weapons, and he directs their installation where these weapons may be located.

The platoon leader directs squads, in turn, to assist counterfire weapons to fire counterfire missions.

The platoon leader makes a counterfire information plan and makes a personal reconnaissance of squad positions. He makes decisions for using the counterfire squads, and he issues clear and concise orders based on his estimate.

The three sound-locating squads are formed into two three-team sections under platoon

c. Displacement of squads during the attack.
d. Sound locating simulated or actual wea-

e. Coordination with a battalion in whose zones the squads are operating.

control.

Standard procedure

All platoon elements maneuver to provide continuous support.

Tactical conditions are simulated.

Charges of TNT or sound and flash simulators may be used instead of weapons to represent hostile firing.

16. DEFENSE (FIFTH PERIOD).

A problem involving the counterfire platoon in the defense, covering counterfire planning and employment of counterfire squads.

The situation is drawn to require-

a. Use of the platoon to provide support for regiment in defense. The platoon leader to issue b. Collection and coordination of counterfire information. c. Defense positions are occupied. Squads sound-locate enemy weapons.

d. Coordination with front line battalions.

The platoon leader makes a counterfire information plan.

sound-locating squads are employed at the same He makes a personal reconnaissance. All time to provide coverage of the regimental front.

The counterfire information center coordinates the collection of data from two or more separate squads.

sites, including a primary location and two alter- . Each squad locates and surveys three different nate locations. This permits lateral movement on a broad front.

17. WITHDRAWALS (SIXTH PERIOD).

A problem involving the counterfire platoon in a night withdrawal.

The situation is drawn to require-

a. Daylight reconnaissance of the new posi-

tion by the platoon leader.

c. Displacement and installation on the cov- Orders to squads. ering force position.

d. Sound locating enemy weapons.

Withdrawal to the new battle position.

f. Survey of base lines and counterfire wea-

g. Sound locating and close association with counterfire weapons.

18. DELAYING ACTION (SEVENTH PERIOD).

A problem involving the counterfire platoon in a regimental delaying action.

The situation is drawn to require-

a. A reconnaissance of successive delaying positions by the platoon leader.

The platoon leader makes a counterfire information plan.

He makes a daylight reconnaissance of the new position and the route to it. He issues clear and concise orders to squad leaders.

He supervises the displacement and installation of squads. One or more squads are located with the covering force.

He supervises the withdrawal to the new po-

sition.

He designates actual or simulated counterfire weapons, and he supervises installation and survey. The platoon leader makes a counterfire information plan.

He makes a terrain or map reconnaissance of successive positions. He issues orders to squad leaders designating routes and general locations on successive positions.

Scope

b. Coordination of sound locating positions with other units.

c. Orders on each position by the platoon eacher.

d. Installation and sound locating.

The platoon leader supervises installation and Standard procedure

survey on the first position. He supervises the mythdrawal and the displacement to successive positions.

He coordinates counterfire information and coordinates the activities of squads.

He assigns fire control missions in close association with actual or simulated counterfire weapons.

The platoon leader visits the unit being relieved, studies the counterfire chart, makes a counterfire information plan, and makes a recon-

naissance of team locations.

He issues orders to squads, provides for guides, and supervises the movement to the squad release point. He takes over the counter-fire chart and receives reports from squad leaders. He reports when ready to assume responsi-

bility for sound locating operations.

He sees that the squads check surveys and equipment.

19. RELIEF IN CONTACT (NINTH PERIOD).

A problem involving the relief of another counterfire platoon in contact with the enemy.

The situation is drawn to require-

- a. Visit of the position and reconnaissance of all sound-locating installations and the counterfire information center by the platoon leader.
 - b. Studying existing plans and the preparation of additional plans by the platoon leader.
 - e. Issuance of orders by the platoon leader. Use of guides. Movement into the position. Exchange of equipment.

d. Checking the survey and reporting when relief is completed by the relieving squads.

20. AIRBORNE OPERATONS (TENTH PERIOD) (for airborne infantry units only).

A problem involving the counterfire platoon of an airborne infantry regiment.

The situation is drawn to require-

- a. Packing of equipment in aerial delivery placing it in the problem area if truck delivery containers and dropping it with the platoon or
- b. Air landing, parachute landing, or simulated landing using trucks and assembly of personnel and equipment in the problem area.
 - c. Orders for deployment of sound-locating squads toward the objective or for all-around
- d. Establishment of contact with the regimental command post and associated counterfire

Secrecy is maintained by controlling noise and by thorough preparation and coordination of movement.

The platoon leader makes a map reconnaissance of the problem area (landing area or drop on its area, mission assembly, and he issues zone and objective area). He orients the platoon orders to cover the period until after assembly is completed.

Squads pack equipment. The platoon and its equipment are delivered in the problem area by parachute, glider, or truck.

The platoon leader assembles the platoon, assists squad leaders to locate preassigned squad locations, and issues such additional orders as necessary. He supervises installation, survey, and establishment of communication. He supervises sound locating and gives the squad practice in close and immediate association with counter-

21. OPERATIONS AT A RIVER LINE (THIRTEENTH PERIOD).

ATTACK OF A RIVER LINE

Scol

A problem involving the counterfire platoon in the attack of a river line. The situation is drawn to require—

a. Reconnaissance of the approaches and near

 Installation of squads and displacement by echelon to the near bank.

c. Continuous reconnaissance and clear, concise orders.

d. Employment of squads on a broad front. e. Crossing of all three squads by echelon with

continuous counterfire operations. *f.* Association with counterfire weapons and sound locating on targets.

g. Coordination with the battalions in whose zones the squads are operating.

Standard procedure

The platoon leader makes a counterfire information plan. He supervises the counterfire squads during the approach to the river, during the reconnaissance of the near and far banks, and to support the crossing.

He supervises sound locating operations continuously as squads advance by bounds.

He supervises displacement and installation of teams until final positions on the near bank are reached.

He supervises sound locating and employment with counterfire weapons on the near bank.

Squads are attached to battalions for the

The platoon leader regains control and supervises operations on the far bank.

DEFENSE OF A RIVER LINE

A problem involving the counterfire platoon in the defense of a river line.

The plateon leader makes a counterfire information plan. He plans the use of information

a. Reconnaissance of the far bank. The situation is drawn to require-

b. Orders by the platoon leader.

c. Use of one or more squads on the far bank

d. Withdrawal across the river.

e. Survey and installation on the near bank.

f. Survey of counterfire weapons in close method of association.

g. Sound-locating targets.

h. Coordination with battalions.

collecting agencies on the far bank and in the battle position.

He reconnoiters the far bank.

He supervises withdrawal of counterfire He issues orders to squads. He assigns missions to one or more squads on the far bank initially.

He requires squads to survey their positions squads across the river to primary positions.

He assigns counterfire missions and directs squads to sound locate on friendly counterfire suspected.

weapons.

and sound locate on targets whose locations are

22. NIGHT COMBAT (FOURTEENTH PERIOD).

A problem involving the counterfire platoon in night operations.

The situation is drawn to require-

problem area by the platoon leader during daya. Map and ground reconnaissance of the

b. Initial orders to the platoon. Movement to

The platoon leader makes a counterfire information plan.

He makes a map and ground reconnaissance of the problem area. He selects initial and subsequent position areas. He issues orders for the movement into initial positions during darkness.

Scope

the problem area by marching during darkness.

- c. Night installation and survey of base lines and adjacent counterfire weapons.
 - d. Sound-locating targets.
- e. Additional orders by the platoon leader. Displacement by echelon and installation of teams in new locations.

Standard procedure

base lines and survey of adjacent simulated or actual counterfire weapons.

He consolidates counterfire information. He plots enemy weapon positions on the counterfire chart. All three squads locate same sound signals.

23. COMBAT IN WOODS (SIXTEENTH PERIOD).

A problem involving the counterfire platoon operating in wooded terrain.

The situation is drawn to require—

a. Reconnaissance by the platoon leader in the problem area to select squad locations and displacement routes. These routes include alternate and supplementary positions.

- b. Orders by the platoon leader. Primary and supplementary positions occupied in turn by
- squads.
 c. Installation and survey of squads. Location of counterfire weapons or survey of weapons in

close association.

The platoon leader makes a counterfire information plan. He makes a reconnaissance of the problem area. He selects locations for squads and routes to squad locations.

He issues orders to squad leaders. He supervises installation and survey. He directs and supervises the displacement to supplementary positions to cover the entire front.

The platoon leader considers the limitations on sound locating by dense vegetation and points them out to his men. He supervises sound ranging and employment with actual or simulated counterfire weapons.

d. Sound locating enemy weapons. Counterfire information coordinated, and requests planned by the platoon leader for additional information from other counterfire information collecting agencies.

Section III. INTELLIGENCE AND RECONNAISSANCE PLATOON

Total hours, infantry units, 61 Total hours, airborne infantry units, 64

24. TRAINING SCHEDULE.

Text Area Training aids references Area	s. 137, 138. Glassroom For instructor: and appropri- blackboard, charts.		photographs.	For student:	notebook, pencil, maps	or aerial photo-	graphs, and observer		report forms, mes-	report forms, message book, and or-	report forms, message book, and organizational equip-
Hours	9 Movement to contact. Pars. 137, 138. (Conference 1 hr:	field exercises 8	hrs.)								
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\$ 24. TRAINING SCHEDULE. (Continued)

	100				
eriod	Trouts	Lessons	Text references	Area	Training aids and equipment
23		Attack.	Pars. 137, 138	Classroom	For instructor:
		(Conference 1 hr;		and appropri-	blackboard, charts,
		field exercises 6		ate terrain.	sandtable, and maps
		hrs.)			or aerial photo-
					graphs.
					For student:
					notebook, pencil, maps
					or aerial photo-
					graphs, observer re-
					port forms, message
					book, and organiza-
					tional equipment.
က	H	Reorganization.	Pars. 137, 140	Classroom.	For instructor:
		(Conference 1 hr.)			blackboard, charts,
					and maps or aerial
					photographs.
					For student:
					notebook, pencil, and
			-		maps or aerial pho-
	_		_		tographs.

For instructor: blackboard, charts, and maps or aerial photographs. For student: notebook, pencil, maps or aerial photo- graphs, observer re- port forms, message book, and organiza- tional equipment.	For instructor: blackboard, charts, sandtable, and maps or aerial photo- graphs. For student: notebook, pencil, maps or aerial photo- graphs, observer re- port forms, message book, and organiza- tional equipment.
Pars. 137, 141 Classroom and appropriate terrain.	ор
Pars. 137, 141	Pars. 137, 142
Pursuit. (Conference 1 hr; field exercise 3 hrs.)	Defense. (Conference 2 hrs; tactical walk 1 hr; field exercise 8 hrs.)
4	Ħ
4	ເລ

24. TRAINING SCHEDULE. (Continued)

Training aids and equipment	For instructor: blackboard, charts, and maps or aerial photographs. For student: notebook, pencil, maps or aerial photo- graphs, observer re- port forms, message book, and organiza- tional equipment.	Do.	For instructor: blackboard, charts, and maps or aerial photographs.
Area	Classroom and appropri- ate terrain.	op	Classroom.
Text references	Pars. 137, 144	Pars. 137, 144	Pars. 137, 145
Lessons	Withdrawal. (Conference 1 hr; field exercise 4 hrs.)	Delaying action. (Conference 1 hr; field exercise 3 hrs.)	Retirement. (Conference 1 hr.)
Hours	າຕ	4	-
Period	ဖ	7	∞

For student: notebook, pencil, and maps or aerial pho- tographs.	For instructor: blackboard, charts, and maps or aerial photographs. For student: notebook, pencil, maps or aerial photo- graphs, and organi- zational equipment.	For instructor: blackboard, charts, maps or aerial photographs and aerial delivery equipment. For student: notebook, pencil, maps or aerial photographs, observer report forms, message	tional equipment.
	Classroom and appropri- ate terrain.	do.	
	Pars. 137, 146	Pars. 137, 147	
	Relief in contact. (Conference 1 hr; tactical walk 1 hr; field exercise 2 hrs.)	Airborne operations. (Conference 1 hr; field exercise 2 hrs.)	*For airborne infantry units only.
	4	* *	rborne in
	o.	10	*For ai

(Continued)
SCHEDULE.
TRAINING
24.

Period	Hours	Lessons	Text	Area	Training aids and equipment
11	က	Antiairborne defense.	Pars. 137, 148	Classroom	For instructor:
		(Conference 1 hr;		and appropri-	blackboard, charts,
		field exercise 2		ate terrain.	and maps or aerial
		hrs.)			photographs.
					For student:
					notebook, pencil, maps
					or aerial photo-
					graphs, observer re-
					port forms, message
					book, and organiza-
					tional equipment.
12	12	Special operations.	Pars. 137,	do	For instructor:
		(Conference 2 hrs:	149-159		blackboard, charts,
		field exercise 10			and maps or aerial
		hrs.)	-		photographs.
			_	•	For student:
					notebook, pencil, maps
					or aerial photo-
			-		graphs, observer re-
					port forms, message
					book, organizational
					equipment, and engi-
					neer bridging.

25. MOVEMENT TO CONTACT (FIRST PERIOD).

ROUTE COLUMN

Scove

a. Clear and concise orders by the platoon A problem involving the intelligence and reconnaissance platoon during route column. The situation is drawn to requireb. Division of the platoon into squad motor

c. Assignment of each patrol to different routes on the regimental axis of advance. patrols.

d. Maintenance of contact by squads with each other and with the platoon leader by radio.

e. Coordination of the rate of advance by the f. Making route and terrain reconnaissance platoon leader.

reports by all patrols.

g. Coordinating with leading battalions.

TACTICAL COLUMN

A problem involving the intelligence and reconnaissance platoon during tactical column.

Standard procedure

The platoon leader orders a breakdown of the platoon into three squad motor patrols.

the regimental axis of advance. The squads pre-He orders each squad to a different route on cede the regiment and make a road and terrain reconnaissance.

and the platoon leader by radio. They also main-The squads maintain contact with each other tain contact with adjacent units which are attached or represented.

advance by phase lines or by subsequent orders. The platoon leader coordinates the rate of

He receives reports from all squads and issues orders, including additional missions, from time to time.

squads to intensify their reconnaissance to the The platoon leader issues orders directing all

Scope

The situation is drawn to require a. Clear and concise orders by the platoon b. Intensified cross-country and flank reconnaissance.

c. Rate of advance coordinated by the platoon leader.

d. Making route and terrain reconnaissance reports by all patrols.

e. Coordinating with leading battalions.

APPROACH MARCH

A problem with the intelligence and reconnaissance platoon during the approach march.

The situation is drawn to require a. Clear and concise orders by the platoon

b. Reconnaissance to the front.

c. Maintenance of contact with the advance guard and adjacent units.

d. Representation of an enemy.e. Reporting information of the route, the ter-

rain, and the enemy's strength and disposition.

Standard procedure flanks and prominent terrain features including woods, stream beds, and adjacent high ground. He coordinates the rate of advance by phase

sions or objectives are assigned after receipt of reports.

lines or movement by bounds. Subsequent mis-

He receives and organizes all reports received, and sends them to the S-2.

The platoon leader issues orders instructing all squads to intensify their reconnaissance and precede the advance party.

By intensive reconnaissance, the patrols locate enemy, report their location, and by-pass them, where possible. Efforts are made to seek out successive enemy points of resistance and locate

the enemy's main line of resistance.
Contact is maintained with the platoon leader and the advance guard, as well as such other units as may cover the advance of the regiment.

The platoon leader receives all reports and supervises all squads.

26. ATTACK (SECOND PERIOD).

PREPARATION IN ASSEMBLY AREA

A problem involving the intelligence and reconnaissance platoon when the regiment is in an assembly area.

The situation is drawn to require-

- a. Issuance of orders to squad reconnaissance patrols by the platoon leader.
 - b. Reconnaissance by patrols of routes leading out of the assembly area.
- c. Coordination with assault battalions.

The platoon leader issues orders to the platoon sergeant and squad leaders. He selects routes for each squad and the distance to be reconnoitered from the assembly area. He indicates methods of reporting and sending warning signals.

He coordinates the movements of all squads. He receives reports and assigns specific reconnaissance missions from time to time.

Other reconnaissance and security units may be represented by radio stations or by personnel at rendezvous points to require patrols to maintain contact.

EXECUTION OF ATTACK

A problem involving the intelligence and reconnaissance platoon in the attack.

The situation is drawn to require—

The platoon leader issues orders to the platoon. He assigns each squad a route in the zone of a front line battalion.

Scone

a. Clear and concise orders to squads by the

platoon leader.

b. Squads to precede and coordinate with leading battalions.

c. Patroling on foot to locate enemy installations and observe terrain characteristics.

d. Prompt and complete reports of enemy locations and other observations.

e. Establishment of observation posts. Movement forward by echelon as the attack pro-

27. PURSUIT (FOURTH PERIOD).

A problem involving the intelligence and reconnaissance platoon during the pursuit.

The situation is drawn to require— α . Clear and concise orders by the platoon

b. Division of the platoon into elements to accompany both the direct pressure force and the encircling force.

c. Maintenance of contact with the enemy by the element with the direct pressure force.

Standard procedure

He designates the regimental objective and probable enemy strong points along the route to it.

As enemy resistance increases, patrols establish observation posts. They report information of the enemy and terrain. Friendly units may also be represented by messages so that patrols or observation posts may report their progress. Patrols or observation posts move by echelon

Patrols or observation posts move by echelon until they reach the objective.

The platoon leader issues orders to divide the platoon into groups. One group is attached to the direct pressure and one attached to the encircling force.

The element with the direct pressure force maintains contact with the enemy, the pursuing elements of the regiment, and the platoon leader. It provides information to insure security of the

direct pressure and assist its advance.

Both elements of the platoon send reports to

- d. Passing on of reports by both elements.
- e. Supervision by the platoon leader of elements of the platoon with both the direct pressure force and the encircling force.

28. DEFENSE (FIFTH PERIOD).

A problem involving the intelligence and reconnaissance platoon in the defense.

The situation is drawn to require-

- a. Issuance of orders and assignment of missions to elements of the platoon by the platoon
- b. Reconnaissance forward of the combat outpost line by elements of the platoon.
- c. Establishment of observation posts on the d. Establishment of observation posts on the combat outpost line by elements of the platoon.
 - e. Patroling on an exposed flank by elements battle position by elements of the platoon. of the platoon.
- f. Patroling ahead of the main line of resistance at night by elements of the platoon.

the platoon leader of the enemy location and its disposition to accept combat.

The platoon leader assigns missions to squads. He arranges subsequent missions and issues He supervises patrols and observation posts. He receives reports. He issues orders for the withdrawal of platoon elements on or ahead of fragmentary orders as the problem progresses. the combat outpost line.

He supervises establishment and occupation of observation posts on the battle position.

The platoon leader or the platoon sergeant instructs patrols before their departure. He checks that objectives are assigned and missions are simple and definite.

The squad leaders coordinate with the battalion with which each is operating.

29. WITHDRAWAL (SIXTH PERIOD).

Scope

A problem involving the intelligence and reconnaissance platoon in a night withdrawal.

The situation is drawn to require a. Reconnaissance of the new position and

routes to it.

b. Issuance of orders and assignments of missions by the platoon leader.

c. Maintenance of normal patrol activity from the old position by elements of the platoon.

d. Reconnaissance to the flanks during the withdrawal.

e. Maintenance of contact with the enemy by elements of the platoon after the covering force withdraws.

f. Occupation of observation posts on the outpost and in the battle position.

30. DELAYING ACTION (SEVENTH PERIOD).

A problem involving the intelligence and reconnaissance platoon in a delaying action.

The situation is drawn to require—

Standard procedure

The platoon leader assigns missions to elements of the platoon.

A squad may be sent to reconnoiter the new position and route of withdrawal. Another squad may patrol to the front of the old position.

During the withdrawal, a third squad may patrol on a flank while the other two prepare observation posts on and ahead of the new position.

The platoon leader supervises these activities. He is assisted by the platoon sergeant. They receive reports and issue orders to obtain essential elements of information.

The platoon leader reconnoiters each delaying position. He plans the location of observation posts and the routes for reconnaissance patrols.

- a. Reconnaissance of the initial and subsequent delaying positions.
- b. Assignment of missions and issuance of orders by the plateon leader.
- c. Reconnaissance of the area ahead of each delaying position. Maintenance of contact with the enemy during each withdrawal by elements of the platoon.
 - d. Establishment of observation posts on each delaying position as it is occupied by elements of the platoon.

31. RELIEF IN CONTACT (NINTH PERIOD).

A problem involving the intelligence and reconnaissance platoon during a relief in contact. The situation is drawn to require—

a. Clear and concise orders by the platoon

b. Coordination with the unit being relieved relative to existing patrol plans, missions, and objectives.

c. Daylight and night patroling with the unit being relieved.

d. Reconnaissance to the front and flanks by

Elements of the platoon reconnoiter to the front of each delaying position, maintain contact, and reconnoiter to the flanks to prevent the enemy from encircling the delaying force.

The platoon leader receives reports and issues orders to patrols. He supervises their actions by requiring them to maintain contact with him and submit frequent reports.

The platoon leader issues orders for certain members of the platoon to accompany him to the location of the unit being relieved.

He requests the patrol plan from the unit being relieved. Upon receiving it he informs his platoon of its contents.

The platoon leader, with selected men of his platoon, accompanies patrols from the unit being relieved during daylight and darkness. Particular attention is focused on boundaries, observation posts, and flanks. The unit being relieved is

the platoon during hours of daylight.

e. Relief during hours of darkness.

f. Passing on of reports.

32. AIRBORNE OPERATIONS (TENTH PERIOD) (for airborne infantry units only).

A problem involving the intelligence and reconnaissance plateon in an airborne operation.

a. Clear and concise orders by the platoon The situation is drawn to requireb. Rapid assembly of the platoon and the immediate movement to the objective.

c. Reconnaissance of the terrain and road conditions en route.

d. Reports from the platoon en route and upon arrival at the objective.

Standard procedure

represented by a few members of the platoon. The relief is made during the night, and patroling is continuous thereafter.

Reports are received by the platoon leader, and all phases of the problem are supervised by him.

The platoon leader explains the mission. He supervises the simulated jump on the drop zone and assembles the platoon. He reorganizes it quickly under cover and either leads the way to the objective or delegates the next in command to do so.

The platoon proceeds by the most direct route to the objective which may be a village, a communication center, a river, or any other terrain feature. En route, the platoon scans the terrain for any antiairborne action from enemy forces or hostile natives. Particular attention is paid to roads and bridges.

Reports of enemy action or any of the above The platoon leader exercises supervision. are sent by the fastest means.

33. ANTIAIRBORNE DEFENSE (ELEVENTH PERIOD),

A problem involving the intelligence and reconnaissance platoon in the defense against airborne operations.

The situation is drawn to require-

a. Clear and concise orders by the platoon

b. Assignment of specific missions to elements

c. Establishment and occupation of observaof the platoon.

d. Patroling near all likely drop or landing tion posts.

e. Passing on of reports from each element.

34. SPECIAL OPERATIONS (TWELFTH PERIOD).

ATTACK OF A RIVER LINE

A problem involving the intelligence and reconnaissance platoon in the attack of a river line. The situation is drawn to require—

a. Reconnaissance of the approaches to the river and the near bank.

Crossing the river and patroling the far

The platoon leader issues orders to break down the platoon into groups. Groups either reconnoiter or occupy observa-

at points affording the broadest view of likely Observation posts are established and occupied areas for an airborne drop or landing.

Reconnaissance is intensive and continues day and night.

by a few platoon members or by messages. The The enemy airborne force may be represented platoon leader issues orders to commit any ele-

ments held in reserve.

patrols on a broad front. He issues complete The platoon leader assigns routes to motorized orders initially and fragmentary orders subsequently as the advance progresses.

Up to the near bank, patrols reconnoiter as in the approach march.

c. Reports to the platoon leader from reconbank on foot by the reconnaissance patrols.

naissance patrols.

d. Issue of fragmentary orders by the platoon leader to continue the advance and reconnais-

e. Reconnaissance reports to include information of the enemy, of roads, routes of approach to the near bank, and bridging sites and landing areas on the far bank.

DEFENSE OF A RIVER LINE

A problem involving the intelligence and reconnaissance platoon in the defense of a river

The situation is drawn to require-

covering force or general outpost and the far a. Reconnaissance of the area between the

b. Operation on the far bank by the platoon leader where he can coordinate and control reconnaissance patrols.

c. Maintenance of contact by patrols with the

Standard procedure

Squads report road conditions, enemy locations and movement, approaches to the river, favorable bridging sites, fords, and favorable landing sites on the far bank.

They reconnoiter for departure routes from the Squads cross by fording at undefended places. river and for location of enemy reserve.

The platoon leader assigns routes or areas of reconnaissance to patrols. He issues fragmentary orders to coordinate and control the action of the platoon.

He directs the withdrawal of patrols through successive phase lines. He receives reports and assigns additional missions from time to time.

Friendly units may be represented by a few plateon members or by messages. Patrols maintain contact with friendly covering forces or with the enemy, and they report friendly and

d. Frequent reports of enemy movement and enemy or with friendly security elements.

enemy progress.

the conduct of delaying action by friendly units.

NIGHT COMBAT

A problem involving the intelligence and rea. Clear and concise orders by the platoon connaissance platoon in night combat. The situation is drawn to require-

c. Establishment and occupation of listening b. Reconnaissance to the front and flanks.

d. Passing on reports by all elements.

The platoon leader prescribes the essential elements of information and assigns missions according to the situation.

Reconnaissance by a combination of foot and motor patrols is intense and continuous. Particular attention is paid to condition of roads and bridges along each assigned route.

Listening posts are established and occupied Reports are submitted by all patrols and liswhere their presence will be of the most value.

tening posts. All listening posts are visited and

supervised by the platoon leader.

COMBAT IN TOWNS

A problem involving the intelligence and rea. Clear and concise orders by the platoon connaissance platoon in combat in a town. The situation is drawn to require-

The platoon leader states the mission and is-Reconnaissance or observation missions are assigned to each group. Reconnaissance groups sues orders organizing the platoon into groups. are given certain streets or buildings to recon-

Scope

b. Assignment of specific missions to elements of the platoon.

c. Establishment and occupation of observation posts.

d. Passing on of reports by all elements.

Standard procedure noiter. Elements used for observation are de-

tailed to vantage points affording a broad view of areas of tactical significance.

Observation posts are established and occupied in buildings that command a wide view of the areas in question.

Reports are submitted by all groups, and supervision of each group is exercised by the platoon leader.

COMBAT IN WOODS

A problem involving the intelligence and reconnaissance platoon in combat in woods.

The situation is drawn to require—

a. Clear and concise orders by the platoon

Assignment of missions to foot patrols.
 Passing on reports from all squads.

The platoon leader divides the platoon into groups, each constituting a foot patrol. Missions are assigned each patrol. Particular

attention is paid to the condition of trails or paths along the route of advance.

Reports are submitted by all groups, and the platoon leader exercises supervision over each

Section IV. ANTITANK MINE PLATOON

35. TRAINING SCHEDULE.

Total hours, infantry units, 76 Total hours, airborne infantry units, 82

Period	Hours	Lessons	Text	Area	Training aids and equipment
H	12	Movement to contact. (Conference 1 hr; motor march 1 hr; foot march 2 hrs; field exercises 8 hrs.)	Pars. 174, 175.	Classroom and appropri- ate terrain.	For instructor: blackboard, charts, and maps. For student: notebook, pencil, map, engineer tracing tape, practice inert, or dummy antitank mines, pioneer tools, and mine field record and report forms.
Ø	∞	Attack. (Conference 1 hr; demonstration 1 hr; field exercises 6 hrs.) Note. When only one antitank mine platoon is present for training Lesson 5 below should precede Lesson 2.	Pars. 174, 176.	ор	For instructor: blackboard, charts, maps, engineer trac- ing tape, and prac- tice inert, or dumny antitank mines.

35. TRAINING SCHEDULE. (Continued)

Training aids and equipment	For demonstration troops and student: notebook, pencil, maps, engineer tape, barbed wire, pickets, and marking signs.	For instructor: blackboard, charts, sandtable, and maps or aerial photo- graphs. For demonstration troops and students: notebook, pencil, maps or aerial photo- graphs, engineer tracing tape, barbed wire, pickets, mark- ing signs, practice inert or dum my mines, and organiza- tional equipment.
Area		Classroom and appropri- ate terrain.
Text references		Pars. 174, 177.
Lessons		Reorganization, (Conference 1 hr; demonstration 1 hr; tactical walk 1 hr; field exercise 3 hrs.)
Hours		Φ
Period		က

For instructor:	blackboard, charts,	sandtable, and maps	or aerial photo-	graphs.	For student:	notebook, pencil, maps	or aerial photo-	graphs, engineer	tracing tape, barbed	wire, pickets, prac-	tice inert, or dummy	antitank mines, dum-	my explosives, and	organizational equip-	ment.	For instructor:	blackboard, charts.	sandtable, and mans	or aerial photo-	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
l, 178. do		_			-		-									Pars. 174, 179. do				*
Pars. 174			-	•												1				
Pursuit. (Conference Pars. 174, 178. do	1 hr; field exercises	7 hrs.)									-					Defense. (Conference	1 hr; demonstration	1 hr; tactical walk 1	hr; field exercise 7	hrs.)
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4																ъ				

35. TRAINING SCHEDULE. (Continued)

Training aids and equipment	For student: notebook, pencil, maps or aerial photographs, engineer tracing tape, barbed wire, pickets, prac- tice, inert, or dummy antitank mines, and organizational equip- ment.	For instructor: blackboard, charts, sandtable, and maps or aerial photo- graphs. For student: notebook, pencil, maps or aerial photo- graphs, engineer
Area		Classroom and appropri- ate terrain.
Text		Pars. 174, 180.
Lessons	·	Withdrawal. (Conference 1 hr; field exercise 7 hrs.)
Hours	·	∞
Period		ω

tracing tape, barbed wire, pickets, practice, inert, or dummy antitank mines, and organizational equipment.	For instructor: blackboard, charts, sandtable, and maps or aerial photo- graphs. For student: notebook, pencil, maps or aerial photo- graphs, engineer tracing tape, barbed wire, practice, inert, or dummy mines, pickets, marking signs, and organiza- tional equipment.
	ор
	Pars. 174, 181.
	Delaying action. (Conference 1 hr; field exercise 7 hrs.)
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	t-

35. TRAINING SCHEDULE. (Continued) 368

Hours	Lessons Retirement (Confer.	Text references Pars. 174, 182.	Area Classroom	Training aids and equipment For instructor:
er er	ence 1 hr; field exercise 3 hrs.)		and appropriate ferrain.	blackboard, charts, sandtable, and large scale map or aerial photographs. For student: notebook, pencil, large scale map or aerial photograph, engineer tracing tape, barbed wire, pickets, marking signs, and organizational equipment.
E C T G	Relief in contact. (Conference 1 hr; tactical walk 1 hr; field exercise 2 hrs.)	Pars. 174, 183.	ор	For instructor: blackboard, charts, and maps or aerial photographs. For student:

					notebook, pencil, and maps or aerial pho- tographs.
10	*9	Airborne operations. (Conference 1 hr; tactical walk 2 hrs; field exercise 3 hrs.)	Pars. 174, 184.	ор	For instructor: blackboard, charts, sandtable, and maps or aerial photo- graphs. For student: notebook, pencil, maps or aerial photo- graphs, engineer tracing tape, barbed wire, pickets, prac- tice, inert, or dummy antitank mines, and organizational equip- ment.
11 For air	12	11 12 Antiairborne defense. (Conference 2 hrs.) For airborne infantry units only.	Pars. 174, 185.	Classroom.	For instructor: blackboard, charts, sandtable, and maps or aerial photo- graphs.

35. TRAINING SCHEDULE. (Continued)

Training aids and equipment	For student: notebook, pencil, and maps or aerial pho- tographs.	For instructor: blackboard, charts, sandtable, and maps or aerial photo- graphs. For student: notebook, pencil, maps, or aerial pho- tographs, engineer tracing tape, barbed wire, pickets, prac- tice inert, or dummy antitank mines, dum- my explosives, and organizational equip- ment.	
Area		Classroom and appropri- ate terrain.	
Text references	·	Pars. 174, 186-196.	
Lessons		Special operations. (Conference 2 hrs; field exercise 4 hrs.)	
Hours		ပ	
Period		12	

36. MOVEMENT TO CONTACT (FIRST PERIOD).

TACTICAL COLUMN

Scope
A problem involving the antitank mine platoon in regimental security on the march.

The situation is drawn to require—

a. Issuance of an order by the platoon leader.

Assignment of missions to squad leaders.

b. Mine field reconnaissance.

Defense of road blocks on the flanks.
 Recovery of mines, removal of road blocks,

and conduct during displacement.

Standard procedure
The platoon may or may not be motorized for

this problem.

The platoon leader assembles the squad leaders and assigns transportation to each squad.

He indicates the march route and assumed missions of the other security elements. He designates the general location of each road block and the squad to construct it. One or more squads reconnoiter to the front for mine fields.

The platoon leader inspects each road block.

He indicates new road block locations along the march route. He checks the displacement of each squad by bounds and its preparation to construct subsequent road blocks.

APPROACH MARCH

A problem involving the antitank mine platoon in the approach march.

The situation is drawn to require—

a. Reconnaissance, breaching, and marking

The platoon may be completely motorized. The platoon leader assembles the platoon under cover, ahead of the regiment and just off the march

Second

mine fields along parallel routes through defiles as they are encountered by each squad.

b. Displacement of squads by bounds.

Standard procedure

He issues fragmentary orders to each squad as each mine field is encountered. He supervises reconnaissance, breaching, and marking of these mine fields. He checks reports prepared by squads and platoon headquarters personnel. By aggressive leadership he insures continuous movement forward so as not to delay the main body.

ASSEMBLY AREAS

A problem involving the antitank mine platoon in the security of a regimental assembly area.

The situation is drawn to require—

a. Issuance of an order by the platoon leader.

Assignment of a mission to each squad.

b. Defense of mine fields and road blocks.

c. Recovery of mines. Removal of road blocks.

The platoon leader assembles the platoon sergeant, the draftsman, the surveyor and instrument man, and the squad leaders in the area

selected for the problem.

The platoon leader makes a terrain evaluation.

He assigns priorities of work and designates parties for siting, laying, and marking mines

and for constructing road blocks. He indicates the assembly area and the location of each mine field and road block. He supervises the squads.

He places the squads for defense of mine fields and road blocks. He supervises the organization and conduct of the defense.

He notifies the squad leaders when the platoon will clear the assembly area. He supervises the removal of road blocks, and the recovery of mines.

37. ATTACK (SECOND PERIOD).

MINE FIELD RECONNAISSANCE

A problem involving the antitank mine platoon in mine field reconnaissance during the attack. The situation is drawn to require—

a. Order by the platoon leader indicating the method of reconnaissance and the mission of each squad.

b. Detailed actions of squad leaders. Designation of reconnaissance and marking parties.

The platoon leader conducts the platoon to the problem area in a tactical formation.

He issues his order to the platoon sergeant, draftsman, surveyor and instrument man, and squad leaders. He indicates the route to be followed by friendly units, and the type of enemy mines to be expected (metallic or nonmetallic). He designates parties and supervises the reconnaissance.

Squad leaders supervise their squads. Personnel reconnoiter the mine field, and complete a reconnaissance record card.

MINE FIELD BREACHING

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A problem involving the antitank mine platoon in breaching a mine field during the attack.

The situation is drawn to require—

a. Issuance of a platoon order. Indication of desired width of lanes. Assignment of squad missions. Indication of desired markings.

b. Detailed actions of squad leaders. Breaching and marking parties.

Standard procedure

The platoon leader conducts the platoon to the problem in a tactical formation.

He issues instructions to the platoon sergeant, draftsman, surveyor and instrument man, and squad leaders. He indicates the near edge of the mine field and the route to be breached. He indicates the desired width of the mine field lane and the type of mines to be expected (metallic or nonmetallic). He selects parties and supervises breaching operations.

Squad leaders supervise their squads. Personnel locate and lift mines, mark lanes, and erect fences and warnings signs.

38. REORGANIZATION (THIRD PERIOD).

A problem involving the antitank mine platoon in a reorganization.

The situation is drawn to require—

a. Terrain evaluation of likely routes for

enemy counterattacking tanks.

b. Issuance of a platoon order. Assignment of

The platoon leader conducts the platoon to an area near the objective.

He points out the objective and the enemy location. He indicates likely routes of approach for an enemy counterattack. He points out friendly unit locations.

areas to be mined by each squad.
c. Supervising, laying, marking, recording, and guarding mine fields.

He issues orders and detailed instructions to squad leaders. He indicates marking and recording methods to the draftsman and to the surveyor and instrument man. He prescribes the supply procedure to the platoon sergeant and The platoon leader designates parties. He supervises the laying, the recording, and the marking of mine fields. He checks squad dispositions for the defense of mine fields. He checks reports

39. PURSUIT (FOURTH PERIOD).

THE DIRECT PRESSURE FORCE

A problem involving the antitank mine platoon in the pursuit. (May be used in conjunction with a delaying action as a two-sided problem.)

The situation is drawn to require a. Issuance of orders by the platoon leader.

b. Assignment of subsequent missions by radio. Operation of squads separately.

c. Conduct of operations by each squad leader.
d. Coordination with the commander of the

The platoon leader arranges for additional vehicles to motorize the platoon. He obtains radios and establishes communication with squad leaders.

He sends each squad to a point along the pursuit route. Each point presents a problem of mine field reconnaissance, breaching, road block reduction, crater repair, or destruction of ob-

He supervises each squad, in turn. At the com-

stacles.

direct pressure force.

Standard procedure

ports by radio, and is directed to another defile pletion of each mission, each squad leader reor point of enemy resistance along the route.

of his progress and position. Mines may be de-Squad leaders take prompt and aggressive action to move their squads to each successive point, and to reduce each obstacle rapidly. Each squad leader keeps the platoon leader informed stroyed in place instead of being removed.

THE ENCIRCLING FORCE

a. Use of passive security measures on the A problem involving the antitank mine platoon The situation is drawn to requirein the pursuit.

- c. Laying, marking, and recording a mine b. Issuance of a platoon order.
- d. Coordination with the commander of the field across the enemy route of withdrawal.
 - encircling force.

vehicles to motorize the platoon. He explains the situation and supervises the loading and the The platoon leader arranges for additional movement.

The platoon moves in a wide encirclement to a point in rear of the enemy covering force.

The platoon leader issues his order to squad leaders. He requires the platoon sergeant to establish local security, and he requires the draftsman and the surveyor and instrument man to record the mine field. Squad leaders are assigned missions. Parties

are designated. Squad leaders supervise their squads. The platoon leader supervises the mine laying, and he disposes the platoon for defense of the mine field.

40. DEFENSE (FIFTH PERIOD).

A problem involving the antitank mine platoon in the defense.

The situation is drawn to require-

a. Reconnaissance and a platoon order.

b. Actions, orders, and supervision by squad and platoon leaders.

c. Location of the platoon for mine field dense.

d. Each element of the platoon to work with a battalion. The platoon to lay or assist in laying a mine field according to a front line battalion defense plan.

e. Orientation of the platoon on the disposition of battalion weapons.

The platoon leader reconnoiters the area ahead of the main line of resistance and makes a terrain evaluation.

He designates the trace of the mine field, indicates squad missions, and prescribes the organization of parties. He issues instructions concerning supply procedure.

He supervises the operation. Squad leaders supervise the siting, the laying and aiming, and the marking parties.

The platoon leader indicates the location of friendly units. He places the platoon for the defense of the mine field. He checks mine field

41. WITHDRAWAL (SIXTH PERIOD).

Scope

A problem involving the antitank mine platoon The situation is drawn to requirein a withdrawal.

a. Issuance of a platoon order on the old position.

b. Movement to the new covering force position. Mine laying in support of the covering

d. Mine laying ahead of the new battle posic. Mine laying in support of the combat out-

Standard procedure

The platoon leader makes a reconnaissance of He notes defiles along the route where mines the route of withdrawal and the new position.

He explains the situation to the platoon. He The platoon moves in a tactical formation to the new covering force position. One or more squads lay mines ahead of the covering force. designates squad missions and routes. may be used to advantage.

The platoon leader moves the platoon to the Mines are scattered across defiles en route. Mine gaps are left open for friendly troops. Road blocks are constructed and craters prepared for combat outpost in front of the new position. field sentries are left at each mine field, and

and sites the mine field. The remainder of the The platoon reaches the new battle position exercise is similar to the defense. combat outpost.

blowing. Mine fields are laid in front of the

42. DELAYING ACTION (SEVENTH PERIOD).

A problem involving the antitank mine platoon in a delaying action.

The situation is drawn to require-

- a. Issue of a platoon order. Mine fields laid in front of successive delaying positions and along the route of delaying action.
- b. Movement in tactical formation between successive delaying positions.
- c. Laying a mine field.

43. RETIREMENT (EIGHTH PERIOD).

A problem involving the antitank mine platoon in a retirement.

The situation is drawn to require-

- a. Issuance of a platoon order.
- b. Movement of the platoon to the covering force position.

The platoon leader reconnoiters each delaying position and the routes in between. He moves the platoon to the first delaying position and assembles the squad leaders and platoon headquarters personnel.

He issues orders to squad leaders and platoon headquarters personnel. He assigns missions and specifies the types of obstacles to be constructed along the route.

He supervises the mine laying and the construction of road blocks and other obstacles. He checks the plan for the defense of each road block. He indicates when each road block is to be abandoned.

Each squad lays a mine field on one position.

The platoon leader makes a reconnaissance to the covering force position. He notes defiles along the route where mines may be used to advantage. The platoon leader explains the situation to his men. He designates squad missions and routes of withdrawal.

c. Mine laying in support of the covering

d. Operations of the platoon with rear guard

elements.

The platoon lays mines across defiles en route, and leaves one or more men to cover the mine The platoon lays mines in front of the coverfields and indicate lanes to friendly units. Standard procedure ing force position.

tered in defiles until contact with the enemy has strates aggressive leadership in preventing the The platoon leader organizes the platoon for a rear guard action by providing transportation for mobile mine laying teams. Mines are scatbeen disengaged. The platoon leader demonenemy from regaining contact.

44. RELIEF IN CONTACT (NINTH PERIOD).

in the relief of another regimental antitank mine A problem involving the antitank mine platoon

The situation is drawn to requireplatoon in contact.

b. Movement to the new position during darka. Issue of a platoon order.

c. Occupation of positions in defense of existing mine fields.

The platoon leader, accompanied by the planaissance of the route to the new positions during daylight. He points out mine fields to squad toon sergeant and squad leaders, makes a recon-

The platoon leader assembles the platoon to defense of a mine field.

leaders and assigns each squad a mission in the

describe the routes to the new position and the mission of each squad. He explains measures for secrecy and precautions against loss of control and contact between men.

The platoon leader leads the platoon to the squad release point. Squad leaders lead their squads to assigned areas.

Squad leaders indicate individual positions, sectors of fire, and pioneer missions. The platoon leader supervises the relief and checks each squad's location.

45. AIRBORNE OPERATIONS (TENTH PERIOD) (for airborne infantry units only).

A problem involving the antitank mine platoon in the airborne objective area.

The situation is drawn to require—

a. Assembly of the platoon, recovery of the equipment, and reorganization on the objective.

b. Issuance of an order by the platoon leader.

The platoon leader makes a map reconnaissance of the drop zone or landing area. He arranges for the platoon to be transported by air and dropped in the problem area, or to be transported in trucks.

He checks squads and supervises the recovery of mines and explosives which are dropped, or previously scattered throughout the area.

The platoon leader issues orders to squad leaders. He assigns antitank mine laying, mine reconnaissance, and pioneering or demolition missions. He supervises squads. He covers the

surrounding area on a personal reconnaissance to verify information obtained from his map reconnaissance.

46. OPERATIONS AT A RIVER LINE (TWELFTH PERIOD).

Scope

A problem involving the antitank mine platoon in the defense of a river line.

The situation is drawn to require a. Issuance of an order by the platoon leader.

b. Establishing road blocks on routes leading to the far bank. Mines laid in conjunction with road blocks and in likely assembly and landing

c. Mine fields laid in likely landing areas on the near bank and across routes leading into the battle position from the bank.

Standard procedure

The platoon leader reconnoiters likely landing sites on the near bank, likely approaches to the far bank, likely crossing sites, and areas where enemy bridging equipment may be unloaded and troops assembled for a crossing.

He assembles the platoon on the far bank. He describes the approaches to the river and likely crossing sites. He issues orders to squad leaders and designates locations for mine dumps to the platoon sergeant. He indicates priorities of mine fields to be laid and assigns missions to each squad.

The platoon leader supervises the laying of mines and establishment of road blocks. He checks squad reports of mine fields laid. He checks to see that platoon records and reports are accurate. Squads lay mines and prepare demolitions.

The platoon leader supervises the crossing by the platoon, indicates the location of mine dumps, and supervises mine laying operations. He checks records and reports of mine fields laid. Squad leaders supervise mine laying by their squads, and submit detailed mine reports.

Section V. SECURITY PLATOON

47. TRAINING SCHEDULE.

Total hours, 43

Hours	Lessons	Text references	Area	Training aids
	Movement to contact. (Conference 2 hrs; motor and foot march 1 hr; field ex- ercise 2 hrs.)	Pars. 208, 209.	Glassroom and appropri- ate terrain.	For i bla ar ar pk For s not not gae
	Period Hours			Movement to contact. (Conference 2 hrs; motor and foot march 1 hr; field exercise 2 hrs.)

47. TRAINING SCHEDULE. (Continued)

Training aids and equipment	For instructor: blackboard, charts, and maps or aerial photographs. For student: notebook, pencil, organizational equipment, and maps, or aerial photographs.	Do.	For instructor: blackboard and charts. For student: notebook and pencil.
Area	Classroom and appropri- ate terrain.	do.	Classroom.
Text references	Pars. 208, 210.	Pars. 208, 211.	Pars. 208, 212.
Lessons	Attack. (Conference 1 hr; field exercise 4 hrs.)	Reorganization. (Conference 1 hr; field exercise 2 hrs.)	Pursuit. (Conference 1 hr.)
Hours	ro		11
Period	Ø	က	ক

For instructor: blackboard, charts, and maps or aerial photographs. For student: notebook, pencil, organizational and individual equipment, and maps or aerial photographs.	For instructor: black board and charts. For student: notebook, pencil, or- ganizational equip- ment, maps or aerial photographs, and traffic control equip- ment.
Classroom and appropri- ate terrain.	ор
Pars. 208, 218.	Pars. 208, 214.
Defense. (Conference Pars. 208, 218. Classroom 1 hr; field exercise 4 hrs.)	Might withdrawal. (Conference 2 hrs; field exercise 2 hrs.)
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47. TRAINING SCHEDULE. (Continued)

Training aids and equipment	For instructor: blackboard and charts. For student: notebook and pencil.	For instructor: blackboard, charts, and maps or aerial photographs. For student: notebook, pencil, or- ganizational equip- ment, and maps or aerial photographs.	For instructor: blackboard and charts. For student: notebook and pencil.
Area	Classroom.	Classroom and appropri- ate terrain.	Classroom.
Text references	Pars. 208, 214.	Pars. 208, 214.	Pars. 208, 214.
Lessons	Daylight withdrawal. (Conference 1 hr.)	Delaying action. (Conference 1 hr; field exercise 1 hr.)	Retirement. (Conference 1 hr.)
Hours	H	Ø	
Period	L	∞	6

For instructor: blackboard, charts, and maps or aerial photographs. For student: notebook, pencil, organizational equipment, and maps or aerial photographs.	Do.	For instructor: blackboard, charts, and maps or aerial photographs. For student: notebook, pencil, and organizational equip- ment.
Classroom and appropri- ate terrain.	Pars. 208, 217. do	ор
Pars. 208, 215.	I	Pars. 208, 218.
Relieved in contact. Pars. 208, 215. Classroom (Conference 1 hr; field exercise 2 hrs.) ate terrain.	Antiairborne defense. (Conference 1 hr; field exercise 2 hrs.)	Special operations. (Conference 2 hrs; field exercises 8 hrs.)
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48. MOVEMENT TO CONTACT (FIRST PERIOD).

Scope

A problem involving the security platoon during a regimental movement to contact. The situation is drawn to require-

a. Reconnaissance of the regimental route of march by the platoon leader.

b. Selection of routes through towns by the platoon leader.

c. Selection of points by the platoon leader at which guides are placed, such as intersections, defiles, and bridges. Assignment of areas of responsibility to each squad leader.

d. Selection of defensive positions for security of the command post between displacements, when the regiment is in the approach march

49. ATTACK (SECOND PERIOD).

providing security for the regimental command A problem involving the security platoon in post when the regiment is in an assembly area. The situation is drawn to require-

He selects squad positions. He issues orders to the squads to occupy these positions, and super-

Standard procedure
The platoon leader, accompanied by his squad leaders, makes a reconnaissance of the regimental route of march.

He arranges to pick up squads after the regi-He selects points at which guides are placed. ment has passed through each squad area. He assigns areas to each squad.

He selects defensive positions around the command post area between displacements.

The exercise is conducted during daylight and again during hours of darkness.

REGIMENT IN ASSEMBLY AREA

The platoon leader makes a reconnaissance of the command post area.

- a. Reconnaissance by the platoon leader of the area selected by the headquarters company commander.
- b. Selection of squad positions by the platoon
- c. Decision by the squad leader as to the formation and location of all weapons in the squad.

d. Preparation of defensive positions by the

e. Installation of communication equipment and the establishment of communication between squads and the platoon headquarters.

EXECUTION OF ATTACK

A problem involving the security platoon in providing security for the regimental command post during the attack.

The situation is drawn to require-

a. Close-in and outer security for the command post as the battalions leave the assembly

- b. Warning systems in case of air, tank, airborne, or gas attacks.
 - Selection of positions to be occupied by other

vises their occupation.

The squad leaders designate weapon positions and prepare passive measures of security. The platoon leader directs squads to establish communication with the platoon headquarters.

The platoon leader selects close-in defensive positions for security of the command post.

He selects positions for outer and flank secur-He issues orders for the occupation of close-in ity of the command post.

and outer security positions.

He accompanies the headquarters company commander on the reconnaissance for a new command post location. The platoon leader designates certain elements

personnel of the command post when supporting the security platoon.

d. Displacement of the command post following the attack.

50. REORGANIZATION (THIRD PERIOD).

A problem involving the security platoon in providing security for the regimental command post during a reorganization.

The situation is drawn to require-

 $\boldsymbol{\alpha}$. Use of a portion of the platoon in defense of the command post.

b. Use of a portion of the platoon as prisoners of war escort.

c. Use of the remainder of the platoon as guides to control traffic in and around the command post.

d. Establishment of straggler control points.

of his platoon to provide security for the new command post area. He has other elements provide guides during the displacement of the command, and he instructs the platoon sergeant, together with the remainder of the platoon, to accompany the rear echelon of the command post when it displaces forward.

The platoon leader supervises the displacement and occupation of the new command post area.

The platoon leader reconnoiters routes to each battalion area.

He determines the location of prisoners of war and notifies each battalion when they are picked up. He issues orders to platoon elements selected to escort prisoners of war. He determines the location of the division or the army prisoner of war collecting point. When the distance from the regimental collecting point is excessive, the platoon leader requests transportation from the regimental S-4.

The platoon leader issues orders as to the

51. DEFENSE (FIFTH PERIOD).

A problem involving the security platoon in the defense.

The situation is drawn to require-

- a. Establishment of prepared positions around the command post.
 - b. Installation of obstacles in critical areas.
- c. Establishment of air and ground warning systems.
- d. Establishment and occupation of supplementary positions.

tions.

52. NIGHT WITHDRAWAL (SIXTH PERIOD).

A problem with the security platoon providing security and guides for the command post during a night withdrawal.

The situation is drawn to require-

handling of stragglers. The platoon leader indicates routes to be used by vehicles in and around the command post.

The platoon leader makes a reconnaissance of the entire command post area. He selects critical points such as defiles and woods. He uses his platoon to secure these areas.

He issues orders to each squad.

He supervises the preparation of each position. He issues orders to prepare supplementary positions. He orders squads to occupy these posi-

He establishes a warning system and requires each squad to occupy its positions upon the warning of an enemy attack.

The platoon leader makes a daylight reconnaissance of the new position. He may be accompanied by squad leaders.

The platoon leader designates elements to pro-

Scope

a. Daylight reconnaissance of the new position by the platoon leader.

b. Orders to squads.c. Establishment of guides at critical points.

d. Occupation of the new command post.

e. Preparation for defense of the command post area.

Standard procedure

vide security of the new area and elements to provide guides during the displacement.

He equips road guides with night traffic control aids such as luminous markers and colored flashlight lens filters.

Command post security elements are moved to the rear and occupy their positions during daylight hours.

Road guides are posted by the squad leader before the departure of leading elements of the command post.

The platoon leader issues orders for the pickup of road guides following the passage of the last elements of the command post.

53. DELAYING ACTION (EIGHTH PERIOD).

A problem involving the security platoon in a delaying action.

The situation is drawn to require-

a. Reconnaissance of successive command post locations during the delaying action.

b. Coordination of action with units presently occupying selected positions.

The platoon leader makes a reconnaissance of successive positions.

He indicates defensive positions for each squad on each position.

He issues orders for the displacement. He supervises the movement from successive posi-

392

c. Issuance of orders by the platoon leader on each position.

He supervises the occupation of each position.

d. Displacement to successive positions.

54. RELIEF IN CONTACT (TENTH PERIOD).

A problem involving the security platoon relieving a similar unit in contact with the enemy.

The situation is drawn to require-

a. Visit by the platoon leader to the location b. Displacement by the platoon leader of his platoon elements forward to the new location of the unit being relieved.

before the relief.

leader during the displacement of the regiment c. Selection of guide positions by the platoon from its bivouac area.

d. Arrangements for receipt of prisoners of war in hands of the unit being relieved.

Straggler routes determined.

The platoon leader visits the unit to be relieved. He reconnoiters established security positions and plans changes in the command post defense plans.

He conducts squad leaders to their assigned areas. Squad leaders reconnoiter areas.

The platoon leader indicates guide posts along the regimental route of march.

He issues orders to elements of his platoon occupying positions in the new area before the arrival of the regiment. He orders road guides to take their positions.

He issues orders to elements of his platoon providing security for the old command post. He supervises the movement into assigned

55. ANTIAIRBORNE DEFENSE (ELEVENTH PERIOD).

A problem involving the security platoon in the defense against airborne operations. The situation is drawn to require—

a. Reconnaissance of the command post area and nearby approaches.

b. Preparation of close-in and outer defenses and air mechanized and gas warning plans.

c. Preparation of supplementary defenses for

d. Occupation of primary defenses. command post personnel.

e. Displacement to a new command post loca-

tion. Use as guides.

Standard procedure

The platoon leader reconnoiters the command post area and adjacent approaches. He plans the close-in and outer defenses. He prepares a warning plan.

The plateon organizes its own defenses and begins the construction of shelters for other command post personnel.

The platoon occupies its defenses and conducts the defense against a simulated attack.

organize the new area, serve as guides, and close The platoon leader supervises the displacement to a new location. Personnel are provided to the old area.

56. SPECIAL OPERATIONS (TWELFTH PERIOD).

ATTACK OF A RIVER LINE

A problem involving the security platoon in the attack of a river line.

a. Reconnaissance of command post locations from the assembly area to the near bank. The situation is drawn to require-

He makes a reconnaissance of the assembly area and selected command post locations toward the river.

He details guides and supervises the displace-

- b. Displacement of the command post toward the near bank.
- c. Crossing to the far bank.
- d. Displacement away from the far bank toward the enemy.
- e. Organization of the command post for de-
- f. Preparation of warning plans.
- g. Rehearsal of command post defense.

NIGHT COMBAT

A problem involving the security platoon in the defense and displacement of the regimental command post at night.

The situation is drawn to require-

a. Reconnaissance, displacement, organization and defense of the command post during dark-

- b. Establishment and rehearsal of the warning system.
 - c. Use of guides at night.
- d. Issuance of clear and concise orders.

He supervises the security plateon during the

He organizes defense plans and establishes a

warning system.

crossing and operations on the far bank.

the first command post position, moves the platoon into it, and supervises organization of The platoon leader makes a reconnaissance of close-in and outer defenses. He supervises the displacement and use of guides.

tion and conduct of the defense. He supervises He issues orders to establish a warning system at each location. He supervises the organizathe rehearsal of warning plans.

COMBAT IN TOWNS

Scope A nroblem involving the security platoon in	Standard procedure The platoon leader reconnoiters the command
compat in towns.	post location and routes into the town. He issues
The situation is drawn to require—	orders to guides and to the command post se-
a. Issuance of orders by the platoon leader.	curity group.
b. Establishment of guides to the command	He supervises the reconnaissance of buildings.
nost location.	He has observation established at high points
c. Reconnaissance of buildings before occupa-	overlooking the town and sees that the warning
tion	system is in operation.
d. Location of booby traps.	He coordinates the defenses of the security
e. Establishment of observation posts and de-	platoon with the use of other command post
fense posts.	personnel.
f. Use of basements and other shelters for	
protection.	
g. Rehearsal of the warning system.	

SAMPLE STANDING OPERATING PROCEDURE FOR COUNTERFIRE SQUAD TECHNIQUE APPENDIX III

Section 1. INSTALLING SOUND LOCATING EQUIPMENT

	3641101111	Section 1: 11431 Arting Soone Localing Egolf Mend		
Chief Operator	Operator	Computer	Plotter	
Control Team	Other Team	Control Team Other Team	Control Team	Other Team
Carries recorder and one ac-	and one ac-	Carries equipment bag (mi-	Carries battery boxes and radiotel-	and radiotel-
cessory chest.		crophones and cable) and	ephones or aiming circle.	circle.
		one sound powered tele-		
		phone and reel set.		
			Car	Carries one ac-
			ຮ	cessory chest.
Places recorder in operating	in operating	Lays out microphones in ap-	Grounds equipment.	ment.
position.		proximate operating position.		
Shows computer exact loca-	exact loca-	Stakes in No. 3 microphone.	Installs field Ins	Installs field
tion of No. 3 microphone.	icrophone.	Places No. 1 microphone to	telephone wire te	telephone wire
		left front and No. 2 micro-	line to the li	line to record-
		phone to right front of No.	counterfire in-	er of control
		3 microphone. Tightens		team. Returns,
		cables and stakes in micro-	ter, the near- m	measuring ap-

proximate dis-

est switch-

phones.

Plotter	Other Team	tance by pacing.	5	nication with the control team.		
P	Control Team	board, or counterfire weapon. Re- turns and measures ap- proximate dis- tance from	counterfire weapon by pacing. Checks commu-	counterfire information center or counterfire information center or counterfire weapon.		
Computer	Other Team		•		Digs a shelter for the recorder.	its magnetic azimuth of 3-1 line on his computer. Tells plotter and other team com-
Com	Control Team				Digs a shelter	Sets magnetic azimuth of 3–1 line on his computer. Tells plotter and other team com-
Operator	Other Team		Sees that the microphones	enemy, and that the cables are tight. Measures magnetic azimuth of 3-1 line with aiming circle or compass (fg. 10).	٠	Tells computer the magnetic azimuth of the 3-1 line.
Chief Operator	Control Team		Sees that th	enemy, and the are tight. Men netic azimuth with aiming ci pass (fig. 10).		Tells compute azimuth of 1

Connects microphone cable to recorder. Checks equipment operation.

Prepares to zero counters on recorder by placing all three microphones equally distant from the operator.

some other signal at a distance Fires individual weapon or gives from the microphones so operator can zero the counters.

> Receives signal from plotter, stops recorder, and zeros counters.

Notifies other team when ready to begin surveying or

sound locating.

ray position. Installs wind Replaces microphones in arscreens. Helps plotter dig emplacement for recorder.

Section II. SELF-SURVEY OF THE BASE LINE

Turns on the Supervises his team during the survey. recorder. Sets the controls.

Tells other Passes messages between computer at control team and plotter at other team. team to prepare for sur-

Disconnects remote control wire line from recorder. Attaches telephone handset to this line. Take it to No. 3 microphone. Provides security for his team. Oband prevents serves team equipment, interference with the

Cher Team Fires individual al weapon when control team is ready to receive sig- nal.	Makes tele- Provides sephone hand- curity for his set connection team. Oband fires shot serves team for other equipment, team when it and prevents repeats the interference survey. Plots the remakes remote sult of the control consurvey.
Plotter Control Team F	Makes telephone handset connection and fires shot for other team when it repeats the survey. Plots the result of the survey.
other Team	Communicates, records, and averages data for other team when it repeats the survey.
Computer Control Team Notifies other team to have plotter fire. Tells chief operator when plotter at other team will fire.	Records the Communicates, survey on the records, and survey data averages data sheet. Comports and records distance peats the suracimuth to other team. Receives and records data from other team when it repeats the survey.
Operator Other Team	Conducts survey if other team repeats the survey.
Chief Operator Control Team Tells computer to notify other team when ready to re- ceive signal.	Stops recorder Conducts surwhen he hears vey if other the shot. team repeats Checks the recording. Sets recorder for manual operation. Makes me as ure-ments on the recorder. Tells computer. Tells computer. Decides whether other team repeats the survey.

Averages results. Gives base line data to the plotter.

Reports survey results to the counterfire information of-

Has survey results reported to the coun-

terfire information officer.

Section III. SURVEYING A COUNTERFIRE WEAPON

Turns on the Supervises his Communicates recorder. Sets team during with plotter the controls. the survey. at the counterfree weapon position.

Lays a tele- Provides sephone field curity for his wire line to team. Obcounterfire serves team weapon posiequipment, tion. Attaches and prevents a telephone in terferhandset to the wire line.

Other Team	Lays a tele- phone field wire line to the counter- fire weapon position, at- taches hand- set, and fires shot or tells counter-fire weapon when to fire when to fire when the survey is conducted by the other
Control Team Fires individual weapon or tells counterfire weapon when to fire.	Returns to con- Lays a teletrolteam, pacphone field ing the distrance as a the countercheck against fire weapon the survey. Provides setaches hand-curity for his set, and fires return. Plots the reweapon when sult of the to fire when survey. Conducted by the other the other than.
iter Other Team	Computes and records survey data when the survey is made by the other team.
Computer Control Team Notifies plotter when to fire his individual weapon or have counter- fire weapon	Records the Computes and survey on the records sursurvey data vey data when sheet. Com- the survey is putes and re- made by the cords distance other team, and magnetic azimuth to the counter- fire weapon position. Records data from other team if it con- there are form other team if it con-
Operator Other Team	Conducts survey when it is made by other team in the same manner as the chief operator at the control team.
Control Team Tells computer to notify plotter when ready to re- ceive signal.	Stops recorder Conducts surwhen he hears vey when it is the shot. made by other Checks the recording. Sets same manner recorder for as the chief manual operoperator at ation. Makes the control measure-team. ments on the recorder. Tells computer. Decides whether to re-

ducts the survey.

Averages results, and tells plotter.

Reports survey results to the counterfire information officer and the counterfire weapon crew or fire direction center.

Has survey results reported to the counterfire information officer and the counterfire weapon crew or fire direction centerfire.

RE TARGET	Plotter Control Team Other Team Provide security for their teams, and prevent interference with sound-locating operations.	
Section IV. SOUND LOCATING A COUNTERFIRE TARGET	Control Team Other Team Both computers communicate with each other by radio-tele- phone or sound-powered tele- phone.	Sets recorder Sets recorder measure-ments on ments on gridded circu-gridded circu-lar disk computer, and puter, and computes computes computes magnetic azimuth to enemy weapon.
Section IV. SC	Operator Other Team Supervises his team.	Uses remote Sets controls control switch in playback to stop both position. recorders. Makes meassets controls urements and in playback tells computposition. er the coun-Makes meas- ter readings. urements and tells computer the counter readings.
	Chief Operator Control Team Turns on the recorder. Sets the controls. Listens for enemy weap- ons.	Uses remote control switch to stop both recorders. Sets controls in playback position. Makes measurements and tells computer readings.

Gets magnetic Gives magnetazimuth from ic azimuth to other team control team computer. computer. Resets record- Resets recorder to listen er to receive enemy signals, again for enemy weapons.

Plots magnetic (May make a a z im u ths 'duplicate plot from both of both magteams to en- n e tic a z imuths.) emy weapon. Locates enemy weapon by tion of these the interseccord both azi-muths on his data sheet, and tell other Records azi- (May also reteam plotter to make a duplicate plot.) muths on data sheet. Tells

plotter.

Tells squad leader or computer location of enemy weapon.

lines.

	Other Team
Plotter	Control Team
ter	Other Team
Computer	Control Team
Operator	Other Team

Chief Operator
Control Team
Sees that eneny we apon
location is reported to
counterfire information offerfire weapControl Team
Reports enemy
weapon location to counterfire inmation officer
or counterfire weap-

APPENDIX IV

DETAILED MESSAGE CENTER PROCEDURE

Section I. OUTGOING MESSAGES

- 1. GENERAL. The procedure outlined herein is applicable to the message centers of infantry regiments and battalions. Any similar procedure which emphasizes speed and simplicity is acceptable.
 - 2. PROCESSING. When a message is handed to the message center chief to be sent, he enters on both copies—
 - a. Time filed (the exact hour and minute he received it).
 - **b.** Message center serial number (the next higher number above that on the last message sent during the current day).
 - c. How sent (the means selected by the message center chief for transmittal).
 - 3. TEMPORARY FILES. a. Live file. The original copy, after processing is completed, is turned over to the transmitting agency by the message center chief unless the message is to be encryptographed. In the latter case, it is turned over to the code clerk. The duplicate copy is retained by the message

center chief in a "live file." This file contains duplicate clear-text or skeleton copies of all outgoing messages for which a receipt or notification of transmission has not been received.

- b. Dead file. As soon as a message has been receipted for, the duplicate copy is placed in the dead file. The dead file contains duplicate clear-text or skeleton copies of all outgoing messages for which a notification of transmission or a receipt has been received. The dead file is collected by the S-1 or his representative, periodically, for disposition.
- c. Code clerk's file. This file contains the original clear-text copy of all outgoing messages sent in code or cipher and the original copies of all incoming code or cipher messages. This file is disposed of as directed by the unit communication officer.
- 4. **SERVICING.** When the message center chief receives a receipt or a notification of transmission for a message transmitted by an electrical means, he enters the time of receipt and his initials or personal sign on the face of the message—encircling both entries. This is called servicing.

5. SELECTION OF THE METHOD OF TRANSMISSION.

- a. The message center chief employs the most suitable means available for the transmission of any message. He must be kept informed, by the various operators, as to the availability of all agencies so that he can use the means at his disposal to the best advantage.
 - b. The message center log is an informal record

of the serviceability of the electrical agencies of communication. In addition, the message center log gives the message center chief a list of numbers to be used in assigning message center numbers to outgoing messages. When a number is assigned, one diagonal line is drawn through that number. When a receipt or notification of transmission has been received for that message, an opposing diagonal line is drawn through that number on the message center log. The message center log also has a remarks column, which may be used by the message center chief to enter any pertinent remarks relating to that message through which he may be able to identify that message at a later date. Message center logs may be prepared in the following form:

DATE 9 FEB 50

		MEANS		RAD SITUATION REPORT TO 1ST DIV	PGN EXECUTED PLAN EASY	RAD RATOON PARTY	MSGR MAP OVERLAY	MSGR AERIAL PHOTOS	RAD ENEMY ATTACK	RAD CP LOCATION	MSGR SITUATION MAP TO DIV	RAD ENEMY PATROL ACTIVITY	MSGR RATION REQUEST TO DIV	MSGR OPERATION MAP TO 3D BN										
	MSG	CEN	NO NO	1	63	က	4	ಬ	9	7	8	6	10	11	12	13	14	15	16	17	18	19	50	
RECORD OF SERVICEABILITY OF MEANS		TP	OUT		6835		1		1225		•		•		•		6661		•		•		•	
			Z		0001		1015		0001				9001						0942		,			
		RAD	TUO NI		9661				6661				6661				6661		0500					
RECORD	OT STINIT	WHICH	CONNECTED		1ST DIV				1ST BN				2D BN				3D BN							

UNIT 2D INF

The message center chief makes a periodic check with all agencies of communication in order to insure that his message center log is kept up to date.

- 6. ACTION TAKEN ON MESSAGES TO BE TRANSMITTED BY MESSENGER. a. When a message is received in duplicate, the message center chief first processes each copy of the message and checks on his message center log the number he assigns to the message. He then enters the proper data on a delivery envelope or delivery list and hands the original of the message (in the delivery envelope or attached to the delivery list, as the case may be) to the messenger, and places the duplicate copy in his live file.
- b. The messenger delivers the message and has the addressee sign the envelope or delivery list at the time the message was received by the addressee.
- c. The messenger then brings the receipted envelope or delivery list back to his own message center. The message center chief then services his duplicate copy, places his duplicate copy in the receipted envelope, and deposits both in the message center dead file. He places an opposing diagonal line through the message center number previously assigned from the message center log.

Section II. INCOMING MESSAGES

7. PROCESSING. Messages delivered by scheduled messenger are received by the message center chief. The message center chief receipts for in-

coming messages and passes the clear text messages to the addressee for the sergeant major.

- a. The code clerk receives incoming encrypted messages. The code clerk decrypts the message, fills out the message form, including spaces for addressee and sender, and delivers the clear text version of the message to the addressee for the sergeant major.
- **b.** The operator of an electrical means receiving incoming message in *clear* text delivers the message to the addressee for the sergeant major.

INDEX

	Paragraph	Page
Adjutant	79, 203	106, 296
Administration:	10, 200	100, 200
	23	18
Ammunition supply		18 229
Antitank mine platoon supply	162 24	19
Automotive maintenance	24 22	19
Company supply	22 25	20
Evacuation of casualties		20 17
General	20	17
Headquarters and headquarters	4	3
company mess	4	ა 21
Recovery	26 26	21
Salvage	26 80	108
Signal supply	80 24	108
Transportation		
Aid man	20, 25	17, 20
Air observers	34	32
Airborne operations:		
Antitank mine platoon	184	281
Communication platoon	111	158
Counterfire platoon	59	88
Intelligence and reconnaissance		
platoon	147	217
Security platoon	216	302
Tactical training	App. II	311
Ammunition	23	18
Amphibious operations. (See Special	,	
operations.)		
Antiairborne defense	60, 112,	89, 160,
	148, 185	217, 282
Antipersonnel mine belt	169	243
Antipersonnel mines	169	243
	_50	

	Paragraph	Pago
Antitank mine field:		
Arming	168	242
Breaching	164	235
Classification	174	263
Dummy mine field	164	235
Laying	168	242
Pattern	163	230
Reconnaissance	164	235
Removal	170	246
Siting	167	241
Standard six-row mine belt	166	238
Antitank mine platoon:		
Airborne operations	184	281
Antipersonnel mine belt	169	243
Armament	160	226
Attack	176	272
Combat orders	165	236
Defense	179	274
Defense against airborne opera-		
tions	185	282
Delaying action	181	279°
Dummy mine field	168	242
Duties of personnel	161	226
Equipment	162	229
Explosives and demolitions	172	256
Laying and arming antitank		
mines	167	241
Leader	160, 161	226
Mine field pattern	166	238
Mines and booby traps	163	230
Mission	9,174	13,263
Movement to contact	175	269
Organization	160	226
Pioneering	173	260
Pursuit	178	273
Records and reports	163	230
Relief in contact	183	280
Removing mine fields	170	246
Reorganization	177	272

	Paragraph	Page
Retirement	182	280
Road blocks	171	254
Sergeant	160, 161	226
Siting antipersonnel mine belt	169	243
Siting antitank mine field	167	241
Special operations	186-196	283
Standard six-row mine belt	166	238
Supply	162	229
Tactical employment	174-196	263
Technique	165-173	236
Training	164	235
Withdrawals	180	275
Antitank mine squad	160, 161	226
Antitank mine squad leader	161	226
Approach march. (See Movement to		
contact.)		
Arctic operations. (See Special opera-		
tions.)		
Armament:		
Antitank mine platoon	160	226
Counterfire platoon	29	25
Intelligence and reconnaissance		
platoon	127	174
Security platoon	198	290
Armorer	4	3
Arrays, microphone	29,41	25, 49
Artillery	30, 34, 35	26, 32, 33
Assembly area	102, 204	
Assistant mess steward	4	3
Assistant squad leader:		
Antitank mine squad	160, 161	226
Counterfire squad	43	56
Intelligence and reconnaissance		
squad	126	172
Security squad	198, 199	290, 291
Athletic instructor	5	10
Attack:		
Antitank mine platoon	176	272
Communication platoon	103	146
	_50	

	Paragraph	Page
Counterfire platoon	51	83
Intelligence and reconnaissance		
platoon	139	208
Security platoon	210	300
Tactical training	App. II	311
Attack of a fortified locality. (See Special operations.)		
Automotive maintenance	24	19
Automotive mechanic	4	3
Axis of reconnaissance	128	176
Axis of signal communication	100	139
Bangalore torpedoes	162	229
Base line, survey	40, 43	47,56
Basic load	23	18
Battalion counterfire squad	28	22
Battle reconnaissance	128	1.76
Bivouac	204	298
Bodyguards	199	291
Breaching mine fields	164	235
Bugler	4	3
Casualties, evacuation	25	20
Chaplain's assistants	5	10
Chauffeur. (See truck driver.)		
Civil affairs	207	299
Civilians, control	207	299
Civilians, examination	136	204
Clerk:		
Code	73, 75	95, 98
Company	4	3
Message center	73,75	95 98
Regimental headquarters	5	10
Close association	32, 42, 47	28, 54, 71
Close reconnaissance	128	176
Cold, operations. (See Special operations.)		
Combat in defiles. (See Special operations.)		

Combat in towns. (See Special opera-	
tions.)	
Combat in woods. (See Special opera-	
tions.)	005
Combat intelligence	
Combat orders, antitank mine platoon 165	236
Command post:	- 4-1
Communication during movement 102	141
Designation and marking 96	134
Displacement 101, 202 140,	
General94	130
Interior arrangement 97	134
Operation and conduct of person-	
nel	137
Security 99, 202 138,	
Selection	130
Commander, company:	
Duties 4	3
Training responsibility 12	15
Communication chief	
Communication means82	109
Communication officer 78, 103 104,	146
Communication platoon:	
Airborne operations 111	158
Attack 103	146
Axis of signal communication 100	139
Defense 106	151
Defense against airborne opera-	
tions 112	160
Delaying action 108	156
Duties of personnel	96
Field lineman 73,76 9	5, 99
Headquarters73	95
Leader 73,74 9	5,96
Means of communication 82	109
Message center chief	95
Message center section	95
Mission 16	16
Movement to contact	141

	Paragraph	Page
Organization	73	95
Pursuit	105	15 0
Radio and radio telephone opera-		
tor	73, 77	95, 102
Radio and visual section	73,77	95, 102
Radio chief	73, 77	95, 102
Radio repairman	73, 77	95, 102
Relief in contact	110	157
Reorganization	104	150
Responsibility for communication	79	106
Retirement	109	157
Special operations	113-124	161
Supply and maintenance	80	108
Switchboard operator	73, 76	95,99
Tactical employment	102-124	141
Tactical training95	B. App. II	129, 311
Training	16	16
Training schedule	App. II	311
Wire chief	73, 76	95, 99
Wire section	73, 74	95, 96
Wire team chief	73, 76	95, 99
Withdrawals	107	152
Communication responsibility	72	94
Communication security	92	126
Company aid man	20, 25	17, 20
Company armorer	4	3
Company commander:	-3	ย
Duties	4	3
Training responsibility	12	15
Company clerk	4	3
Company headquarters:	4	9
Duties of personnel	4	3
Organization	4	3
Tactical training. (See Training	4	ъ
schedules.)		
Tactical training	App. II	311
Training	13	16
Training schedule	22	18
Company supply	41, 43	49, 56
	41, TO	40,00

	Paragraph	Page
Computer, counterfire squad	28	22
Control of civilians	207	299
Cooks	4	3
Counterbattery	30	26
Counterfire:	4.	
Chart	33	31
Information	31	27
Information center	28, 31	22, 27
Information plan	36, 51, 53,	36, 83, 84
	55, 58	86, 87
Missions	35	33
Officer	28, 31	22, 27
Operations	30, 32, 33	26, 28, 31
Platoon:	,,	,,
Airborne operations	59	88
Armament, equipment, main-		
tenance and supply	29	25
Attack	51	83
Battalion counterfire squad	28	22
Defense	54	84
Defense against airborne op-	,	~-
erations	60	89
Delaying action	56	86
Duties of personnel	28	22
Headquarters	27, 28, 29	22, 25
Immediate association	32	28
Leader	28	22
Methods of employment	32	28
Mission	6, 49	12,80
Movement to contact	50	82
Organization	27	22
Pursuit	53	84
Radio repairman	28	22
Records and reports	37	36
Relief in contact	58	87
Reorganization	52	84
Retirement	57	87
Selection of locations	40	47
Sergeant	28	22

	Paragraph	Page
Shelling reports	37	36
Sound locating	39	43
Sources of counterfire infor-		
mation	34	32
Special operations	61 - 71	89
Squad leader	28, 41	22, 49
Survey of base line	40,43	47,56
Tactical employment	49-71	80
Tactical training	App. II	311
Technique	39 - 48	43
Theory of sound locating	39	43
Training	15, 38	16, 40
Training schedule	App. II	311
Withdrawals	55	86
Sergeant, battalion	33	31
Squad:		
Duties of personnel	28,34	22,32
Organization	27	22
Orientation of position	42	54
Squad leader	41	49
Weapons	30, 35	26,33
Counterintelligence	128	173
Countermortar	30	26
Countersigns	202	295
Cryptographic security	92	126
Cryptographing	App. IV	407
Daylight withdrawal. (See Withdraw-		
als.)		405
Decryptographing	App. IV	467
Defense:		
Antitank mine platoon		274
Command post		138
Communication platoon		151
Counterfire platoon		84
Intelligence and reconnaissance		
platoon		209
Security platoon		296
Tactical training	App. II	311

_	Parayraph	Page
Defense against airborne operations:		
Antitank mine platoon	185	282
Communication platoon	112	160
Counterfire platoon	60	. 89
Intelligence and reconnaissance		
platoon	147	217
Security platoon	217	303
Tactical training	App. II	311
Delaying action:		
Antitank mine platoon	181	279
Communication platoon	108	156
Counterfire platoon	56	86
Intelligence and reconnaissance		
platoon	144	215
Security platoon	214	301
Tactical training	App. II	311
Demolitions	164, 172	235, 256
Desert operations. (See Special operations.)		
Direct support artillery	30.35	26, 33
Division antitank mine field	174	263
Draftsman	5, 161	10, 226
Driver, truck	4, 73, 76,	3, 95, 99,
Eliver, bruch	77, 126,	102, 172,
	161, 199	
Dummy mine field	174	263
Duties of personnel:		
Antitank mine platoon	161	226
Communication platoon	74	96
Company headquarters	4	3
Counterfire platoon	28	22
Intelligence and reconnaissance		
platoon	126	172
Radio and visual section	77	102
Regimental headquarters section	5	10
Security platoon	199	291
• •	100	
Employment methods, counterfire pla-		_
toon	32	28

	Paragraph	Page
Encryptographing	App. IV	407
Entertainment specialist	5	10
Equipment:		
Antitank mine platoon	162	229
Communication platoon	80,81	108, 109
Counterfire platoon	29	25
Intelligence and reconnaissance		
platoon	127	174
Security platoon	198	290
Essential elements of information	128	176
Evacuation of casualties	25	20
Examination of prisoners and civilians	136	204
Executive, company	4, 13	3, 16
Explosives	164, 172	235, 256
T. 11 1:		
Field lineman	76	99
Filler personnel	4	3
First sergeant	4, 13	3, 16
Food service apprentice	4	3
Foot reconnaissance	133	184
Forms:	1.00	200
Mine field report	163	230
Observer report	135	196
Shelling report	37	36
Fortified locations, attack. (See Spe-		
cial operations.)		
Gas officer	4	3
Guards	199, 200.	_
	202, 204	295, 298
Guides	197, 199,	•
	205, 206	298
	,	
Headquarters commandant	4,79	3, 106
Heavy mortar company	34	3 2
Immediate execution	90 40 45	00 54 56
Immediate association Information	32, 42, 47 128	28, 54, 56 176
Counterfire		
	129	27,88 178
Sources	129	1.19

	Paragraph	Page
Information and education personnel	5	10
Instrument man, surveyor and	161	226
Intelligence	128	176
Intelligence and reconnaissance pla-		
toon:		
Airborne operations	147	217
Armament	127	174
Attack	139	208
Communication	127	174
Defense	142	209
Defense against airborne opera-		
tions	147	217
Delaying action	144	215
Duties of personnel	126	172
Intelligence technique	132-136	184
Leader	137	205
Mission	8	13
Movement to contact	138	206
Organization	125	172
Pursuit	141	209
Relief in contact	146	216
Reorganization	140	208
Retirement	145	216
Sergeant	125	172
Special operations	149-159	218
Tactical employment	137–159	205
Tactical training	App. II	311
Technique. (See Intelligence technique.)		
Training	17, 131	17, 182
Training schedule	App. II	311
Withdrawals	143	213
Intelligence sergeant	125	172
Intelligence technique	132–136	184
Jungle operations. (See Special operations.)		
Laying and arming antitank mines	168	242
Lineman, field	73	95

	Paragraph	Page
Listening posts	218	303
Log message center	App. IV	407
Maintenance:		
Automotive	24	19
	81	109
Communication equipment	173	260
Marches. (See Movement to contact.)	173	200
Means of communication	82	109
Mechanic	82 4	3
Medical treatment	2 5	20
	$\begin{array}{c} 25 \\ 21 \end{array}$	18
	21 91	125
Message center	73	125 95
Message center chief	73 73	
Message center clerk		95
Message center procedure	App. IV	407
Messages	82, 85	109, 118
Messenger communication	82, 85	109, 118
Messengers	73, 74,	95, 96,
	82, 102	109, 141
Mess steward	4, 13, 21	3, 16, 18
Method, counterfire employment	49-71	80
Microphone arrays	29,41	25,49
Military government	207	299
Military intelligence	128	176
Military police functions, security pla-		
toon	200, 201	294, 295
Mine detectors	170	246
Mine field armer	168	242
Mine layer	168	242
Mines. (See Antitank mine platoon.)		
Mission:		
Antitank mine platoon	18, 174	17, 263
Communication platoon	16	16
Counterfire platoon	15	16
Headquarters company		1
Intelligence and reconnaissance		
platoon		17
Security platoon		17

	Paragraph	Page
Motorized patroling	133	184
Motorized reconnaissance	133	184
Motor sergeant	4, 13	3, 16
Motor transportation	24, 198	19, 290
Mountain operations. (See Special operations.)		
Movement to contact:		
Antitank mine platoon	175	269
Communication platoon	102	141
Counterfire platoon	50	82
Intelligence and reconnaissance		
platoon	138	206
Security platoon	209	299
Tactical training	App. II	311
Night combat. (See Special operations, withdrawals, or relief in contact.)		
Night reconnaissance	133	184
Night withdrawal. (See Withdrawals.)		
Observation posts	134	194
Obstacles	173	260
Offensive combat. (See Movement to contact, attack, reorganization, pursuit, airborne operations, and special operations.)		
Operations at a river line. (See Special operations.)		
Operations, counterfire platoon	32	28
Operations in snow and cold. (See Special operations.)		
Operations sergeant	5	10
Operator:		
Radio, communication platoon	73	95
Radiotelephone	73	95
Switchboard	73	95
Orderlies	4	3
	•	9

	Paragraph	Page
Orders:		
Antitank mine platoon	165	236
Combat	165	236
Communication	91	125
Operation	90	124
Organization:		
Antitank mine platoon	160	226
Communication platoon	73	95
Company headquarters	3	1
Counterfire platoon	27	22
Headquarters company	3	1
Intelligence and reconnaissance		
platoon	125	172
Regimental headquarters section	5	10
Security platoon	198	290
Outposts	202	295
Panels	86, 97,	120, 134,
1 aneis	102	141
Party lines	83	110
Patroling	133	184
Pattern, mine field	166	238
Photo-interpretation teams	34	32
Physical security, communication	0.	0_
items	92	126
Pioneers	160, 161	226
Pioneering	173	260
Platoon leader:		
Antitank mine platoon	160, 161	226
Communication platoon	73	95
Counterfire platoon	28	22
Intelligence and reconnaissance		
platoon	126	172
Security platoon	199	291
Training responsibility	12	15
Platoon sergeant:		
Antitank mine platoon	160, 161	226
Communication platoon	73	95
Counterfire platoon	28	22
Countering spinoon	20	

	Paragraph	Page
Intelligence and reconnaissance		
platoon	126	172
Security platoon	199	291
Plotter, counterfire squad	28, 41, 43	22, 49, 56
Police functions, security platoon	200	294
Positions, selection	4	3
Primer	172	256
Principles of reconnaissance	133	184
Prisoner of war:		
Collecting point	199	291
Examination	136	204
Interrogation teams	34	32
Purpose and scope	1	1
Pursuit:		•
Antitank mine platoon	178	273
Communication platoon	105	150
Counterfire platoon	53	84
Intelligence and reconnaissance		
platoon	141	209
Security platoon	212	300
Tactical training	App. II	311
Pyrotechnics, use	86, 102	129
Quartering party	203	296
Radio:		-
Chief	73, 77	95, 102
Communication	82, 84,	109, 113,
	102	141
Nets	103	146
Operator:		
Communication platoon	73,77	95, 102
Intelligence and reconnais-		
sance platoon	126	172
Repairman:		
Communication platoon	73	95
Counterfire platoon	28	22

	$Paragraph_{\cdot}$	Page
Sets:		
Range	84	113
Types	84	113
Silence	103, 111	146, 158
Radiotelephone operator	73, 77,	
•	126	172
Rapid method	46	65
Reconnaissance	128	176
By fire	128	176
In force	128	176
Methods	133	184
Principles	130	180
Squad, intelligence and reconnais-		
sance platoon	125	172
Recorder, sound-locating set	29, 40, 41	25, 47, 49
Records and reports:		
Antitank mine platoon	163	230
Counterfire platoon	36	36
Recovery and salvage	26	21
Regimental headquarters section:		
Duties of personnel	5	10
Organization	5	10
Tactical training	App. II	311
Training	14	16
Training schedules	App. II	311
Regimental staff:		
Communication officer	74	96
Headquarters commandant	4	3
S-1 (Adjutant)	79	106
S-2	26,79,	21, 106.
	137	205
S-3	19, 33,	17, 31.
	79	106
Supervision by	3, 12	1, 15
Relay posts	84	113
Relief in contact:		
Antitank mine platoon	183	280
Communication platoon		
Counterfire platoon	58	87

	Paragraph	Page
Intelligence and reconnaissance		
platoon	146	222
Security platoon	215	302
Tactical training	App. 11	311
Removing mine fields	170	246
Reorganization:		
Antitank mine platoon	177	272
Communication platoon	104	150
Counterfire platoon	52	84
Intelligence and reconnaissance		
platoon	140	208
Security platoon	211	300
Tactical training	App. II	311
Repairman:		
Radio, communication platoon	73,77	95, 102
Radio, counterfire platoon	28	22
Reports:		
Observer and reconnaissance	135	196
Shelling	37	36
Sound locating	36	36
Responsibility:		
Communication	72	94
Company commander	4, 13	3, 16
Company executive	4	3
Retirement:		
Antitank mine platoon	182	280
Communication platoon	109	157
Counterfire platoon	57	87
Intelligence and reconnaissance		
platoon	145	216
Security platoon	214	301
Tactical training	App. II	311
Retrograde movements:		
Delaying action. (See Delaying action.)		
Retirement. (See Retirement.)		
Withdrawals. (See Withdrawals.)		
Riflemen	199	291
River line. (See Special operations.)	_	

	Paragraph	Page
Road blocks	171, 202	254,295
Route column. (See Movement to con-		
tact.)		
Route reconnaissance	128	176
C 1 (Adintant)	79	106
S-1 (Adjutant)	• •	
S-2, intelligence officer	26, 79, 137	21, 106, 205
C 2time and tooling afficer		
S-3, operations and training officer	19, 79, 55	17, 106, 31
G 1	0.0	21
Salvage	26	1
Scope and purpose	_	172
Scout-observer	126	172
Security:	0.0	100
Cryptographic	92	126
Functions, security platoon	197, 201	290, 295
Mine fields	174	263
Physical, communication items	92	126
Regimental command post	201,202	295
Signal	92	126
Squad	198, 199	290,291
Transmission	92	126
Security platoon:		
Airborne operations	216	302
Armament	198	290
Attack	210	300
Defense	213	301
Defense against airborne opera-		
tions	217	303
Delaying action	214	301
Duties of personnel	199	291
Leader	199	291
Mission	10, 197,	13, 290,
	201	295
Movement to contact	209	299
Organization	198	290
Police functions	206, 207	298, 299
Pursuit	212	300
Relief in contact	215	302

	Paragraph	Page
Reorganization	211	300
Retirement	214	301
Retrograde movements	214	301
Role during moves and marches	205	298
Sergeant	203	296
Special operations	218	303
Tactical employment	208-218	299
Tactical training	App. II	311
Technique	201-207	295
Training	19, 200	17, 294
Training schedule	App. II	311
Withdrawals	214	301
Sergeant major, regimental	5	10
Servicing (messages)	App. IV	407
Shelling reports	37	36
Signal:		
Annex	88	122
Communication orders	88	122
Operation instructions (SOI)	88	122
Security	92	126
Sound	87	122
Supply	80	108
Siting of mine fields	167	241
Snow, operations. (See Special opera-		
tions.)		
Sound communication	- 87	122
Sound direction finding	39	43
Sound locating	27, 39, 40,	22, 43, 47,
_	44, 45, 48	62, 76
Sound-locating squad data sheets	45	62
Sound-powered telephone. (See Telephone.)		
Sound ranging	39	43
Sources of counterfire information	34	32
Sources of information	129	178
Special operations:		
Antitank mine platoon	186-196	283
Communication platoon	113-124	161
Counterfire platoon	61-71	89
· · · · · · · · · · · · · · · · ·		

	Paragraph	Page
Intelligence and reconnaissance		
platoon	149-159	218
Security platoon	218	303
Tactical training	App. 11	311
Squad leader:		
Antitank mine squad	160	226
Counterfire squad	43	56
Reconnaissance squad	126	172
Security squad	198, 199	290, 291
Standard six-row mine belt	166	238
Standing operating procedure	89, 132	123, 184
Communication platoon	88	122
Counterfire platoon	App. III	397
Standing signal instructions	88	122
Stenographer, headquarters	5	10
Supply	22	18
Class III	24	19
Officer, company	79	106
Sergeant	4, 13	3, 16
Survey:	,	ŕ
Base line	40, 43	47, 56
Counterfire weapon	42	54
Surveyor and instrument man	161, 166	226, 238
Switchboard operator	73, 76	95, 99
•	,	,
Tactical:		
Column. (See Movement to con-		
tact.)		
Employment:		
Antitank mine platoon	174–196	263
Communication platoon	102-124	141
Counterfire platoon	49 - 71	80
Intelligence and reconnais-		
sance platoon	137 - 159	205
Security platoon	208-218	$2^{2}9$
Target sound ranging	39	43
Technique:		
Antitank mine platoon	165 - 173	236
Counterfire platoon	39 - 48	43

Intelligence and reconnaissance	Paragrap	h Page
platoon	132-136	184
Security platoon	201-207	295
Telephone	97	134
Theory of sound locating	39	43
Theory of sound ranging	39	43
Time fuze	172	256
Topographic draftsman	5	10
Traffic control	202, 206,	295, 298,
Transe control	202, 200,	299
Training:	200	200
Antitank mine platoon	18, 164	17, 235
Communication	92	126
Company headquarters	14	16
Counterfire platoon	38	40
Intelligence and reconnaissance		-320
platoon	131	182
Objective	11	13
Phases	11	13
Problems (tactical training)	App. II	311
Regimental headquarters section.	15	16
Responsibility	12	15
Security platoon	200	294
Transmission security	92	126
Transportation	24, 127	19, 174
Trip flares	162	229
Troop information and education per-	102	220
sonnel	5	10
Truck drivers	4, 73, 76,	3, 95, 99,
Truck drivers	77, 126,	102, 172,
	199	291
	100	
Unit:		
· Administrator	4	3
Antitank mine field	174	263
	92, 131	126, 182
Training	<i>54</i> , 101	120, 104
Visual communication	86	120



	Paragraph	Page
Warning, air (antiaircraft), mechan-		
ized (antitank), chemical (gas)	202, 204	295, 298
Warrant officer	4	3
Weapons, counterfire	35	33
Wire:		
Chief	73,76	95,99
Communication	83, 102	110, 141
Laying	83	110
Team chief	73,76	95, 99
Withdrawals:		
Antitank mine platoon	180	275
Communication platoon	107	152
Counterfire platoon	55	86
Intelligence and reconnaissance		
platoon	143	213
Security platoon	214	301
Tactical training	App. II	311

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